

THE
PARENT's and GUARDIAN's
DIRECTORY,
AND THE
YOUTH's GUIDE,

IN THE

Choice of a PROFESSION or TRADE.

CONTAINING

- I. An Essay on the Education of the TRADESMAN and MECHANIC.
- II. The Qualifications necessary for those designed for the THREE LEARNED PROFESSIONS.
- III. An Account of the several TRADES and MECHANIC ARTS, digested in alphabetical Order: In which the Busineses omitted by other Authors are here inserted; the Qualifications necessary for each Trade are explained; the Sums given with Apprentices; the Wages of Journeymen; and the Sums required to set up Masters, are exhibited.
- IV. ADVICE to an APPRENTICE on his Behaviour while subject to his Master.

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By JOSEPH COLLYER, Esq;

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THE
 LARSEN'S AND CLARKE'S
 DIRECTOR
 AND THE
 YOUTHFUL GUIDE
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Choice of a Profession or Trade.

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I. A History of the Professions of the Law, Medicine, and

II. The Qualifications necessary for those designed for
 the Royal Service, and for the

III. A History of the Professions of the Church, and of the
 Arts, and of the various Trades, in which the
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THE

P R E F A C E.

MY Motive for writing the following work was a love of the Arts, and a sincere desire to promote the happiness of those useful persons who practise them; particularly of those boys who have not yet entered into the business that is to constitute their employment through life, and on which their happiness, their credit, and usefulness must principally depend. Those brought up to trade, and the exercise of the manual arts, for whose advantage this work is wrote, constitute a great and most valuable

part of the nation; for as they furnish all our conveniencies and accommodations, and all the articles of commerce, from them are originally derived the sources of national wealth, national strength and honour.

This work is therefore calculated to be of the most extensive use, since it is formed for the advantage of all the active and the industrious of every rank, by shewing the proper qualifications for being admitted into each class. One principal design of it being to prevent that misapplication of genius and abilities, which too often creates aukward tradesmen, makes bunglers in the arts, and renders those poor and contemptible, who might shine and make a figure in a business more adapted to their capacities, I have been led to give some directions to parents and guardians on this important subject. I have therefore traced the great business of Education from the most early infancy; have given rules for the discovery of the genius, and shewn the necessity of consulting it. The little that has been wrote on the education of the tradesman and mechanic has left room for
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many new observations, which I am persuaded will be approved by every judicious and candid reader; as the rules I have there given will evidently be of the greatest advantage to those for whose use they were designed. In particular every one must be sensible of the advantage and the pleasure a boy will receive by directing his education to that particular profession, to that trade, or art, for which he appears peculiarly designed by nature.

The moral observations with respect to education are partly my own, and partly such as I have borrowed from the greatest and most approved authors, particularly the great Mr. *Locke*, and the ingenious Mr. *Fordyce*, to whom I am obliged for many admirable rules of conduct, in forming the minds of youth to a lively sense of virtue, honour, and integrity, and a love of decency, temperance, and humanity.

Those exhortations to the youths themselves, which naturally fell in my way, will I hope be also of use to my young readers, as they

they tend to answer the same valuable purposes, to promote their perfection in business, their reputation, and lasting happiness, by leading them to be useful, worthy, and amiable members of the community. I heartily wish that what is here offered may have this effect; and shall be sincerely glad to see any endeavours of mine answer such valuable purposes.

The advice given to parents and guardians on the choice of a master is so necessary, that it could not be dispensed with; as here the grossest errors are frequently committed, and it is too often seen, that for want of sufficient care in this particular, the unhappy youth is inevitably ruined.

As to that part of this work which relates to the various trades and professions, I have added a considerable number that have never been described and explained in any other performance; in which I have been assisted by the artists themselves. I have also corrected many mistakes in the description of those trades I have borrowed from other authors; and

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and have given in each an account of the qualifications and learning necessary for a boy before his being put apprentice, of the sums required by the masters, those paid to journeymen, and those necessary to enable a young man to set up for himself. The greatest care has here been taken to avoid mistakes; and, after this care, it will not be thought presumption to assert, that this part is by far more copious and accurate, than what is to be found in any other account of trades yet published.

To render this work as complete as possible, it was necessary to add, Advice to an Apprentice on his behaviour while subject to his master. Several excellent pieces have indeed been already published on this subject; but they are mostly confined to youths of fortune brought up to trade, and have but few observations that relate to the artist. This defect I have endeavoured to supply.

Upon the whole as this work may be highly useful to parents and guardians, in fitting and disposing of their children to the
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different professions and trades; and as it is calculated for the advantage of apprentices themselves, who, by following the instructions here contained, will obtain the esteem and love of mankind; it is therefore humbly conceived, that it can hardly fail of meeting with a reception in some measure adequate to the good design of the Author.

CHAP.

CHAP. I.

Of EDUCATION in General.

THE business of Education is the most important duty of the parent and the guardian; and consists in taking proper measures to train up the child for the works and business of manhood, and to fulfil the design of his creation, by preparing him for a happy immortality. This care ought to begin with the earliest infancy; and to be carried on so as to fit the youth for that profession, or art, for which he is particularly suited by Nature, from the texture of his body, and the turn of his mind.

As the infant is entered into a world, in which no advantages of abilities and fortune can wholly secure him from care, pain and disappointment; and in which, it is very probable, that he may suffer innumerable hardships, it must be the duty of both the parents, to endeavour, as much as possible, to prevent the child's mind being too much softened by endearments, and improper indulgence;

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and the limbs being rendered weak, by too much heat, and by bandages that obstruct that circulation, which is necessary both to the regular growth of all animal beings, and to their strength, vigour, and activity. Besides, by inuring even the infant to bear the inclemencies of the seasons, he is not only enabled to support them without pain, but is in a great measure freed from the many dangers that attend catching violent colds.

If the parent would have the infant an happy man, he ought to take the greatest care to prevent the establishment and growth of those passions that are enemies to all true felicity; and therefore when the child wantonly cries, storms, and strikes all about him, or is peevish and obstinate, let him see that this is not the way of procuring what he wants: It ought rather to expose him to punishment; or, if he is old enough to understand what is said to him, let him fast till he becomes cool, and will hearken to reason.

The inforcement of this, and most of the rules relating to the government and management of children during their infancy, must particularly lie upon the mother: 'Tis she that must inure him to the weather; that should teach him to conquer the turbulent passions; and that must early implant in his mind those little maxims of prudence, decency, and decorum, that ought to grow up with him,
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and at length become the rules of his future conduct. To give strength to the mind of her child, she should endeavour to shew, that she herself is possessed of it; she should not scream out upon every slight accident that may happen to the tender object of her fond solicitude; nor should she fondle and caress the little darling for every slight hurt: She should rather endeavour to make the child sensible, by her whole behaviour, that pain and disappointments are what must be expected; and that there is a good degree of heroism, in being able to bear them with patience. This is the best way of giving the child true fortitude. The mother should take care, that the tender brain of the infant be not disordered by his being suddenly waked from sleep, either with loud noises, or by a rough and boisterous behaviour. She should be careful not to create groundless fears, by making the child afraid of being in the dark, and by telling him idle tales of ghosts, apparitions, hobgoblins, and haunted houses. It is also the duty of the mother to instil into the infant mind the first principles of religion and virtue. Mothers are the natural nurses of their children; and it is their business to tutor and mould their minds as well as their bodies; and they are the first who shape their manners as well as their limbs. They ought therefore to attend to all the directions given in this chapter, though they are not immediately addressed to them; and, as they value the happiness of their offspring, they should

avoid counteracting their husbands, by giving contrary advice, concealing the faults of their children, and screening them from punishment.

The greatest care ought to be taken, in infancy, lest the child should contract a cruel disposition. He should not be suffered to torture even the most noxious animals, or to make their pain a subject of amusement and diversion. The parent tells his child, that it is a crime to kill a man; but he forgets to inform him, that it is cruel to run pins through flies, and that, even a noxious animal is to be destroyed with as little pain as possible. He does not consider, that his suffering little master in petticoats, or in his first breeches, to make sport with the terrors and miseries of a poor sparrow, will, by degrees, teach him to think pain is no evil, but when he feels it. The parent ought not to be much astonished, if his darling son, whom he has permitted, in his infancy, thus to torment innocent creatures, should have the cruel dispositions of a ruffian, and have no tender feelings for the infirmities of his old age.

It is wisely enacted by our laws, that those whose employment leads them to frequent sights of blood and death, as butchers, surgeons, &c. should not be admitted on juries in capital cases: lest their hearts should have lost some part of the sensibility nature has given them. But the parent who suffers

fers the juvenile butcher, in his own family, to tear off the wings of flies, run pins through cock-chafers, throw at cocks, &c. to the utmost of his power, frustrates the design of this salutary law. On the contrary, I would teach a boy to look upon himself as the guardian and benefactor of the friendless race; and give him the charge of a bird, a squirrel, a cat, or a dog, which should be considered as constituting his family; whose wants he should supply, and whose distresses he should remove. By such little exercises of humanity to creatures below him, he should be prepared for the higher acts of benevolence to mankind. Children have naturally an affectionate temper, and a sensibility that may be easily improved into the most generous affections.

Upon all occasions, a selfish and sordid disposition ought to be discouraged. The child should be taught to give a part of what he likes best to his brother, his sister, or his play-fellow; and when he sees a miserable object, I would endeavour sometimes to persuade him, to give his halfpenny appropriated to the buying of ginger-bread, or fruit, to his relief. The parent who thus acts, will generally find, that his child will readily conform to his inclinations, and generously sacrifice a gratification to the satisfaction of doing good.

Indeed children not only love to do good-natured things, but are greatly delighted with the simple recital of kind actions, and nothing affords them a finer entertainment than a moral tale wherein goodness forms the principal characters, and appears in a variety of beautiful incidents, that inculcate high notions of humanity. Tales like these are fine exercises for the young mind ; they teach it to open, and to interweave their natural love of virtue and hatred of vice with their very passions, and most familiar sensations.

But while parents are solicitous to guard their offspring against stinginess and narrowness of soul, they should endeavour to moderate the openness of their temper, and to check a spirit of prodigality, by instructing them in the true value and use of money. They should be taught to retrench all superfluous, and especially all hurtful expence ; and even when they have the expectation of a handsome fortune, they should be instructed in the art of being liberal without being profuse, and frugal without being sordid.

One of the most early lessons taught to children should be a strict regard to truth ; which the parents, as in all other cases, should encourage by their own examples. A habit of lying and prevarication is easily learnt ; and if not checked in time seldom fails to introduce a crooked, perverted disposition,

position, that is the bane of all society. It is necessary then, that children should have as little temptation to falshood as possible; and therefore a fault should be easily forgiven, upon their ingenuously confessing it; but a lie, made to conceal it, should be always punished as a heinous crime. Every degree of dissingenuity should be represented as the mark of an abject mind; but truth and sincerity should be applauded as proofs of a soul truly great, and too conscious of its own dignity, to use any of the little tricks of craft and falshood. This will naturally teach them to associate honour and nobleness of mind with openness and veracity, and infamy and littleness of soul with dissimulation and falshood.

Nature has deeply implanted in the tender minds of children submission to parents, a proneness to imitation, and an insatiable curiosity, which renders them willing to listen to the opinion and judgment of those whom they esteem wiser and better than themselves. Parental authority is therefore one of the best means of moulding the mind into its true form; but when that is dissolved by the vices, or the too great indulgence of the parent, scarce any tie will bind, or any check controul it: Persuasions and promises, terrors and bribes, will be equally insufficient. Parents then ought to be extremely tender of their authority; since that alone can give weight to all their instructions. It is necessary for

them to inspire their children with a just mixture of reverence and love, by tempering necessary severity with a discreet kindness; allowing great familiarity, yet checking the least symptom of irreverence and indecent behaviour. Thus, whenever the authority of the parent is disputed or despised, it should be maintained with inflexible severity; and no condescensions be made on the side of the parent, till it is fully acknowledged, and fairly submitted to.

This is particularly necessary before the child is capable of judging for himself, and of seeing the reasonableness of a command. But when he obtains the use of his rational faculties, his obedience ought to be free and rational; proceeding from a sense of duty, and the reasonableness of the command: And here a parent, of any tolerable degree of sagacity, will be able to distinguish when a child desires a reason, whether it be done from mere scrupulosity, or from stubbornness and aversion to his duty. In the former case, he will employ persuasion, supported by reason; and in the latter, a proper mixture of reason and authority. When the boy finds himself treated in this rational and manly way, his spirit and obedience will be liberal and ingenuous; and he will account his parent his best friend and counsellor.

Though a parent would be highly to blame to punish a child for falling down in the dirt, and by
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an unavoidable accident daubing himself and his cloaths; since this would be inflicting chastisement on account of a misfortune. : Yet care should be taken to give every child a love of cleanliness in his person, and neatness in his dress; which seem to demand a suitable decorum of behaviour: But, at the same time, both the father and the mother should join their endeavours, to prevent his giving way to effeminacy and pride, by frequently reminding him, that the advantages of dress, are what he owes to others and not to himself; that these can make no alteration in his real character, except, by his becoming proud of them, they render him ridiculous.

Complaisance and affability to inferiors ought to be carefully cultivated, at the same time that too great a familiarity with servants and people of a very low rank should be discouraged. A child should never be suffered to strike servants, or to call them names, in a fit of passion; for their being permitted to act thus, makes them readily think that such servants are either of an inferior species, or at best made to be only their slaves; and that therefore they have a right to play the tyrants over them: An opinion that naturally produces insolence and inhumanity. On the contrary, it should be constantly sounded in their ears, that their rank and condition, whatever it is, will be better supported by an unassuming carriage, and an easy humanity,

than by insolence, or a peevish and imperious stiffness. That the former behaviour is that of a gentleman; and the latter, that of a rude and illiterate clown.

Hospitality towards strangers should be represented as one of the most generous and elevated virtues of humanity; the want of which betrays an untaught and savage mind. The child should be made sensible, that it is the greatest mark of folly and ignorance, to laugh at a foreigner, because his dress and manners are very different from ours; and he should be shewn, that such a stranger has an equal right to ridicule us because we are not dressed like him.

In the same manner, a child ought to be guarded against the ridiculous and impious practice of insulting people on account of their personal defects; and should be frequently reminded, that it is very wicked, to give a man or woman the ridiculous title of *My Lord* or *My Lady*, on account of the prominence of his or her back: That crooked legs, and every other defect, entitle a person to pity; but not to reproach, any more than a broken bone, or a dislocated limb: And that to use a man ill, because he is an idiot, is an high affront on the Almighty, who has made the difference, and a preposterous abuse of the superior sense he has bestowed.

The child should be early taught to pay a deference to age, and to behave with a becoming respect to all about him. Affability, complaisance, and good manners are indispensable duties; but great care should be taken, that a child's modesty and respect for his superiors does not degenerate into a sheepish bashfulness: For this, if it be indulged, will be a bar to his advancement in business during his whole life. Let him then be early accustomed to talk with strangers; let him be introduced into the company of his superiors; and in proportion, as he becomes fit for conversation, let him be allowed modestly to give his opinion. A becoming assurance will ever be of the greatest use both to the gentleman and the man of business: And as every one is liable to be called before a court of justice, or even before the House of Commons, it is highly proper, that the boy should be allowed, if possible, to appear among a considerable number of boys and men; and to speak before them with a becoming boldness. This may be easily done at school; where he may repeat by heart a copy of verses, or a speech either from a book, or a copy wrote for that purpose, before the master, the boys, and some of their relations.

The next duties I shall mention under the article of Education in general, are a love and reverence of the Supreme Being, as the author of life, and of all our blessings, as the parent, the guardian and the friend of mankind; a love for his native

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country, with whose interests he should be taught to consider himself as inseparably connected; and a regard for the happiness of the whole human race. These dispositions, if deeply rooted in the mind of the child, will have an effect on his whole conduct, and contribute both to his happiness and that of the community.

I shall conclude this chapter with observing, that the parent, in order to give courage to his child, and at the same time to render him flexible to advice and reproof, as well as prompt to action, should enter into all his feelings; take a pleasure in what contributes to his satisfaction; and let him receive as much entertainment and delight as possible in the instruction he imparts, or in the course he wants him to steer.

C H A P. II.

Of the particular Education of the tradesman and mechanic; the necessity of consulting a boy's genius; how this may be discovered; and the branches of learning proper for a youth designed for trade.

I AM very sensible that there are many fathers, mothers, and guardians, who give themselves but little care about the Education of their children; and that the short observations I have given in the foregoing chapter, and those I shall here add, will have less effect than I could wish on the generality of parents: Some of whom are so engrossed by business and pleasure, that they trouble themselves but little about their children, while they are of an age that demands their most assiduous care; when the mind calls for cultivation; when the passions should be reduced into proper bounds; and when the maxims of virtue and the precepts of religion ought to be planted in the heart. Even those who take some care of the minds of their offspring, generally do little more; than make them read sometimes a chapter in the bible, learn their catechism by rote, and refer them for all farther instruction to a school-master, who frequently

quently pays but little regard to their morals. Among the parents, who are fondest of their children, and are willing to be at some expence in their education, are those, who on their making choice of a boarding-school, are determined less by the abilities, the learning, and the virtues of the master, than by the plentifulness of the table, and the consideration, whether young master will very often dine upon veal, as well as beef and mutton ; and whether he will be frequently regaled with pies and puddings. This is, with the fond mother, a more important consideration than the boy's proficiency in learning ; and the child himself, after her example, is taught to consider the gratification of his appetite as a thing of the utmost consequence. How absurd is this ! when it is considered that the boy is soon after to be put apprentice, where he may at once be deprived of these gratifications ; and that when his time is expired, his placing too high a value on the indulgence of his palate may be attended with the greatest inconveniencies : For a tradesman, who cannot with perfect good humour suffer his dinner to cool while he is serving a customer, or cannot fast, in order to complete an advantageous bargain, ought not to expect, that he will be ever able to improve his fortune.

But to return : The parents who are truly solicitous about the welfare of their children, ought to
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consider their education as an affair of such consequence, that it cannot without a great fault be committed to others; and that it is at least their duty to oversee and direct the management of it. The natural inquisitiveness of youth will give the father a thousand opportunities of storing the memory of his son with new accessions of useful knowledge; which he should communicate in the most entertaining way possible. He should carefully study the bent of his young mind, and endeavour as early as possible to discover, whether he has a particular genius that will probably lead him to excel in any of the arts and sciences, in order that he may suit his education to it.

A parent, by stepping into the shop of a common mechanic, may give a son, designed for trade, or a mechanic art, more instructive lessons than can be learned from books: For the things he ought to be chiefly instructed in, should be such as have some connection with human life, or are of use to beautify and improve it. When he is found surveying a tool, a loom, a mill, or any work of art, he may be prompted to observe its use and make, may be shewn the several parts of a machine, how they depend upon each other, and in what manner they are capable of answering the purposes for which they are designed. In order to keep his curiosity awake, he may be shewn the various changes many things

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undergo, as flax, wool, and metals, which he may see in their different states, together with the instruments by which these changes are produced. When he asks questions, his curiosity should never be baffled, except when they relate to things improper for him to know, and even then he should be denied with great softness, and some reasons given why he cannot be now satisfied; either because he asks things above his age, or that are not fit for him at present to know.

Thus the parent, or the guardian, may not only infuse a great deal of useful knowledge into a boy's mind, that may afterwards, on a thousand occasions, be of service to him in his business and commerce with the world; but he may get some insight into his genius. It will be worth the parent's while sometimes to divert a leisure half hour, by watching his son while at play, and observing his favourite amusements; by which means he will easily learn, with little care, to what kind of employment the young mind has the greatest propensity, and whether what he sees him perform is owing to the bent of his genius, or to mere chance or accident.

Children are naturally fond of mimicking every thing they see; their parents, or guardians, should therefore be careful not to mistake what arises from their

their natural activity and love of play, for the effects of genius. Thus a boy's military talents cannot justly be inferred, from his aping what he has seen performed by the soldiers, from his marching with his companions in rank and file, and performing a part of the manual exercise with a broomstick. This generally proceeds only from the love of novelty ; and from the same disposition he will imitate the carpenter, the cooper, the smith, or any other artist he observes at work : But if he is watched, he will be found to grow tired of the amusements that have no connection with his natural genius, and return to that which has taken the deepest root in his young mind, and in which he has made considerable improvement. Thus, if he is fond of drawing, it is an indication that Nature has designed him for some of the finer arts, and that his genius will not be misapplied, if he is put apprentice to one of the many trades in which drawing is of the greatest use ; he should there be shewn the best designs, encouraged to pursue the bent of his mind, and be put under the instructions of an able master. If he is fond of making mills, either for wind or water, and shews genius and skill in the contrivance of them, let him be taught mechanics ; a study that will be highly entertaining and instructive to a youth who is fond of studying the construction of engines. If a boy, of great ingenuity, takes delight in building houses, of clay
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or other coarse materials ; and after all the new diversions, to which he may be prompted by the inconstancy and love of novelty incident to youth, returns to it again with fresh alacrity, and proceeds from clumsy performances to those that give proofs of elegance and design ; and if, at the same time, he is observed to be frequently sketching out with chalk, or a pencil, buildings, bridges, columns, pediments, or other ornaments of architecture that fall within his notice, let him, if his friends are in such circumstances as to settle him handsomely in the world, receive the education necessary for the architect, which the reader will find particularly mentioned under that article. But, if his friends are not in circumstances to give him so liberal an education ; or if he does not appear to have that refined and elegant taste which ought to distinguish the architect, the youth may yet make a great figure as a mason, a bricklayer, or a carpenter ; and he ought to have the education proper for one designed to be a master of the business allotted for him. Let the youth, of a contemplative turn, be allowed to apply to his favourite studies. Nature perhaps has designed him for one of the learned professions, or for some of those that are dependant on them. The parent, or the guardian, will easily judge, from the subjects to which he most pleasingly directs his chief attention, in what profession he will be the most

most happy ; and in that he will be most likely to succeed.

It frequently happens that a boy's genius will admit of the choice of several trades or professions, on account of their having a near resemblance to each other : In which case, that is to be chosen which is most agreeable to his external and internal advantages, and to the circumstances of the parents, &c. Thus, if in the choice of two trades, for which the boy has an equal genius, one requires great strength of body, and the other does not : The boy, if he is of a weakly constitution, ought to be put apprentice to that which requires the least bodily strength. Again, if in two professions, for which the youth seems to have an almost equal propensity, one requires an happy elocution, and a pleasing address, if the youth cannot speak without hesitation, choice should be made of that business in which a fluency of speech is not necessary.

There are some boys who have so happy a genius as to be capable of any thing to which they apply, but have so mercurial a disposition, as seldom to settle to any thing long together. Where this is the case, choice should be made on having consulted the boy's genius, of that business, which has the greatest variety in it : for some of the mechanic arts are capable of employing the most extensive

tensive genius : and these are only fit for such extensive talents. The workman who is pleased with variety, and easily perceives the dependance that every part has on the whole, grows stupid when confined to one study, and is cloyed with a dull repetition of the same employment : on the other hand, the heavy plodding workman is lost in the labyrinth of the various parts, and as his mind can only act in a narrow sphere, he can never arrive at perfection in them all. Thus youth ought to be classed in the order nature has allotted them, that every individual may act a natural character, which alone can give them success and promote their happiness.

From these considerations the ridiculousness of giving every boy the same education must fully appear. Tho' I have an high opinion of the Latin and Greek tongues, yet I cannot help observing that they would be far from being of any real use to the generality of tradesmen and mechanics, even were they perfect masters of them. Yet I have known boys intended to spend their lives in the measuring of tapes and ribbons, in the weighing of sugar and plumbs, in the making of shoes, in the hammering of kettles, spend five or six years under the discipline of the rod, to acquire an imperfect knowledge of a few Latin words, and of rules of which they are to make no manner of use; these the

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poor boys entirely forget before they have served half their apprenticeship; yet these very boys, even those who are to pass great part of their time in settling accounts, are too often deficient in the knowledge of the common rules of arithmetic. This absurd custom is however less generally practised than formerly. The ridiculous notion that the knowledge of a little Latin is necessary to the understanding and spelling of English loses ground, and people have found by experience, that those who are acquainted with the learned languages, are not always good writers of their own.

In those trades, which by the fortune they require, raise the tradesman to the rank of a gentleman, it cannot be denied but that a learned education may be of great advantage; but none can reap any benefit from an imperfect and superficial knowledge of the dead languages, which is almost all that can be acquired by most of those who are brought up to trade. The merchant may acquire more liberal sentiments by being conversant with the Greek and Roman authors: but he will obtain more real advantages with respect to trade, by being able to converse and write in French, Dutch, Spanish, and Portuguese. His character as a gentleman may make him learn the former, and the advantages of trade render it necessary that he should not be ignorant of the latter. I would not be understood

stood to insinuate here that the knowledge of the learned languages is not highly necessary in other busineses, it may be useful to the bookseller, the printer, the apothecary, chymist, &c.

It is however objected, that a boy has commonly a great deal of time to spare from his having learned to read and write, to his being of an age fit to be put apprentice, and it is asked how he can be employed and kept out of mischief, without this study?

In answer to this I shall observe, that boys ought not only to learn to read, but to read gracefully; this indeed few masters are able to teach them; however they seldom learn to read as well as their masters, or with so much ease to themselves, and pleasure to those who hear them as they might do. While they are endeavouring to become perfect in reading, they should learn a short English grammar, and obtain a good running hand fit for business, together with the knowledge of arithmetic; these are necessary for every tradesman; they may be all practised at the same time, and each will serve as a relief from the other, by unbending the mind, which would be fatigued by much application to the same subject.

As nothing is of greater use to any man, and particularly to a tradesman, than the ability of expressing his thoughts on any subject to a friend or a correspondent, the boy should be early accustomed to write letters. This should be a task enjoined him by the master, who should oblige him to write his thoughts in the form of letters, on such subjects, as the boy is fully acquainted with, he should correct every fault, every instance of impropriety, stiffness of stile or lameness of expression, and with great good nature show him in how many different ways an expression may be mended.

The necessity of learning to draw, where the boy has a genius for a business that requires skill in that ingenious art has been already hinted, and is farther enforced in the course of this work; we shall therefore here only observe, that this ought to be learned betimes, as soon as his genius is discovered. This cannot be begun too early, and in many arts it is too late to learn when the boy is put apprentice; for then his fingers become stiffened with labour, he naturally grows more clumsy, and finds great difficulty in making a tolerable proficiency; but if he has learnt it before, this cannot deprive him of it.

In many arts the knowledge of geometry, and mechanics, if not absolutely necessary to be obtained,

ed, before the boy goes apprentice, are so useful in assisting him in learning his business, with ease and pleasure to himself, and so necessary after he has learnt it, that a boy designed for such a business cannot well employ his time better, than by acquiring the knowledge of those arts, before his being bound to a master.

As there may be still a good deal of time to fill up before the boy is of an age fit to go apprentice, let him apply to such studies as will open his mind, improve his knowledge, and qualify him for making one day a reputable figure in the world. Let him be taken from school, and be obliged to spend some hours every day in carefully reading the history of his native country, let his father or his guardian, explain to him what he does not understand, and particularly make him acquainted with the constitution of these kingdoms: when he has acquired a sufficient knowledge of these subjects, and has the principal events of our history stored up in his memory, let him study geography, not by getting by heart names and tables of longitudes and latitudes, which he will soon forget, but by reading some judicious and concise abridgment of voyages and travels, by which he will most easily, and with the greatest delight, learn the situation of countries, the advantages and disadvantages of each; the manners, customs, arts, commodities,
religion

religion and government of nations ; he will thus extend his views, and as by reading the history of his native country and of its constitution, he will render it dearer to him, and obtain something of a patriot spirit ; so by the more general study of the world, he will get rid of a thousand little prejudices, obtain a stock of knowledge that will be of lasting use, and will learn to pity those who enjoy less advantages than are bestowed on himself.

C

CHAP.

C H A P. III.

*Advice to parents and guardians on the choice
of a master for a child.*

WE have already observed the necessity of consulting the genius of youth; but pride, avarice or whim are too often the chief counsellors of the father, the mother, or the guardian, when they deliberate on the most serious concern in life, the proper settlement of their children in the world. With respect to pride, parents think it a dishonour to put their children to any branch of business, which they do not consider as a genteel trade, or that has not something in it suitable to their notions of grandeur. From this motive, a father who will have 500*l.* to bestow on his son, will give 200*l.* with him to a linnen draper, a wholesale hosier, or a fugar-baker, and by this preposterous step oblige the young man to be a journeyman as long as he lives; when he might in some other trade easily become master, make a good figure in life, and by the blessing of heaven, bring up a family and perhaps acquire a fortune for his children. Indeed a journeyman in some of the genteel trades, makes no contemptible figure in the world, and may live very happily: but not to mention his being in some degree subject to another, from his not
being

being entirely the master of his own actions, it is certain that while he is in this state he can never marry, without he can light upon a woman with a fortune sufficient to raise him above it. For a journeyman to any tradesman must unavoidably struggle under great difficulties by being obliged to support the expence of a wife and children.

From the same motive of vanity or inconsideration, a parent or guardian will put a youth apprentice to a wholesale bookseller or stationer, when the fortune the boy is to receive will not be more than sufficient to enable him to set up a genteel shop in a retail way, and is far from being adequate to the credit that must unavoidably be given by those who send large parcels into the country, or serve the shops in town. By this means, the young man learns nothing but how to pack up goods, and to keep the books of the shop, and may be as unfit to set up a retail shop when out of his apprenticeship, as if he had never been bred to any branch of the business.

Indeed with respect to all trades which merely consist of buying and selling, a youth can gain very little advantage by serving an apprenticeship of seven years to them, more than may be learnt in a few months, and his obtaining the freedom of the city: but he who has money and friends, cannot

perhaps employ his time better from about fourteen or fifteen years of age to twenty-one or twenty-two, than among those goods of which he proposes to make a livelihood; but then it ought to be done in such a manner, as will be of most use to him when he sets up for himself.

From vanity and inconsideration parents frequently purchase a pair of colours for a son who has not one qualification for making a figure as an officer; or without any fortune to support a young man when he comes into the world, till he can make his merit known, chuse for him one of the learned professions: hence we see poor clergymen who would have been infinitely more happy had they been bred to the meanest manual employment; physicians who have never an opportunity of discovering their skill in medicine, because they are poor, and an infinite number of poor retainers to the law, who are prompted by want to obstruct or evade the course of justice.

There are other parents and other guardians who are unwilling to advance any considerable sum for putting a boy apprentice, even though they could do it without much inconvenience, and who from the sordidness of their disposition, have no other motive in chusing a trade or fixing upon a master, but the smallness of the sum that will be given with him.

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This indeed is a mean and sordid motive; but persons of this disposition are not to be wrought upon by arguments; for the strongest reasons can have no weight with them.

Others indeed are from the difficulties under which they struggle, obliged to consider the smallness of the sum proposed by a master, as a considerable motive for their putting a son apprentice to him. Such a parent will find many trades, many arts in the course of this work, where but small sums are required by a master, and in which a young man of industry and ingenuity may obtain a comfortable, and even a genteel subsistence; in many of these where the boy has a genius for an art, and an education suited to it, his qualifications will be valued by a master more than an apprentice's fee.

A parent or guardian having discovered the boy's genius, and fixed upon a trade adapted to it, should chuse among the several masters in that branch, one of perfect integrity, humanity, and piety. If the man is without religion, the boy will lose all the advantages of a religious education; and there will be lost too all the pleasing hopes a pious parent might entertain of his being an ornament to the christian religion here, and at length a member of the kingdom of heaven. If he puts him to a dishonest man, he may expect that
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his son, will learn to be a knave : if he puts him apprentice to a reprobate, his master may plant in his mind, with the mysteries of his profession, the seeds of vice and profaneness. I am sorry to say, that these reflections, however obvious, are not sufficiently attended to, and that many pious parents, through a criminal inadvertency, contribute to the final destruction of their own children, notwithstanding their having a sincere concern for their happiness. What amazing infatuation ! yet this is the case with most parents, and nothing can produce a reformation in the morals of youth, without they learn in this important affair to behave with greater wisdom and circumspection.

If the parent or conscientious guardian chuses a master who is ignorant of his business, the boy will be obliged to pick up all his knowledge from the information of journeymen, and if he is not carried forwards by the force of his own genius, will be in great danger of being at last a bungler. If the boy is put to a master who is surly, ill-natured and morose, he will be frighted from learning his business ; his temper may be too much broke, he may become dispirited, and obtain a distaste to his profession, or be induced to venture every thing by running away. There are some masters who consider apprentices as mere slaves, and imagine they are under no obligation to spend their time in
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rendering them perfect in their business; they employ them in such work as will best turn to their own advantage, and give themselves no trouble about any thing else. Some designedly conceal a valuable secret in their business, known to few besides themselves, and notwithstanding their promising in their indentures to teach boys their whole art and mystery, basely violate their obligations, by concealing from their apprentices what is of the greatest importance they should know.

In short, both the youth's morals, his success in learning his business, and his happiness during the time of his apprenticeship, chiefly depend on the master: this however is not all, the temper of the wife is also to be considered; for if she rules her husband, he will find it difficult to teach his apprentice, and the boy may be very unhappy by being obliged to spin out seven years under the dominion of a female tyrant. In this case, instead of regularly learning his trade, he may be obliged to spend some years in running of her errands, and doing the drudgery of the house.

After these observations I believe I need not spend any more time in cautioning those parents and guardians, who are capable of reflection, and have any regard for their offspring, or to those entrusted

to their care, to be very cautious in the choice of proper masters. I shall therefore now conclude this chapter, and after treating of the three learned professions, shall give an account of the several trades, which I chuse to present the reader in the order of the alphabet, that each may be found without the trouble of consulting an index.

CHAP.

C H A P. IV.

Of the three learned professions DIVINITY,
LAW and PHYSIC.I. *Of* DIVINITY.

BEFORE a parent resolves to make his son a clergyman, he should be fully convinced that he has those natural talents that are suitable to the character of a divine, a clear apprehension, a lively imagination, a solid judgment, a tenacious memory, and a happy elocution: to these should be added, an unfeigned love of truth and virtue, a rational piety, a soul overflowing with universal love and benevolence, and a communicative disposition. How few are there who begin their studies with those engaging qualifications! The parent or the guardian has too often no other reason for bringing up a youth to the ministry, than their having a good living in their gift, or being able to purchase an advowson. Hence has arisen so many clergymen and ministers of all professions, unworthy of the character, who have been a disgrace to the order, and have dishonoured the cause they ought to have supported.

These dispositions may be in part discovered in infancy, and the seeds of them will bud out so as to appear more visible before the youth is ready to enter the university: but if while he is there, he has the unhappiness to contract ill habits, and in the most dangerous season of life, is led astray by bad company, and induced to become fond of drinking, or of women; with the loss of his virtue, he will lose every qualification for the ministry; and may therefore with a much better grace apply himself to the study of either of the other learned professions, and particularly to the law, where his vices, if he still retains his humanity and integrity, will not be so prejudicial to society: but it ought to be remembered that drunkenness and lewdness are destructive in every profession, beneath the dignity of a man, and unworthy of a rational being.

The parent and tutor ought to take care that the seeds of the above amiable virtues are not stifled in their growth, or suffered to run into improper channels: they should be cultivated with the utmost care and the young unexperienced mind guarded against all bad impressions. He should be strengthened with all the animating motives of religion, and by every prudential maxim, and if he has really a love of learning, his application to his studies will also be a strong safeguard to his virtue.

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The studies of the clergyman ought to be very extensive; besides the knowledge of the Latin, Greek and Hebrew tongues, he is to enlarge his mind and cultivate his understanding by the study of history and natural philosophy. Ethics, or moral philosophy, ought to engage his serious attention, and while he considers the voice of nature, and the laws of the Almighty impressed on the human heart, he should earnestly apply himself to the study of the holy scriptures, and solely animated by an impartial love of truth and virtue, endeavour to obtain a thorough knowledge of the mild and generous principles of Christianity, and the evidence upon which that divine religion is founded. Tho' the mathematics are not absolutely necessary to a divine, yet they may be of considerable service, in strengthening his love of truth, and giving him an habit of thinking abstractedly upon every subject. He should apply himself also to the study of logic and metaphysics; but here little more will be necessary, than being perfectly acquainted with Mr. Locke's excellent treatise on the human understanding.

There is another part of the education of a clergyman that is but little attended to, tho' it is of the utmost importance, and absolutely necessary to his having any considerable success in converting and reforming mankind. This is a perfect skill in

the oratory of the pulpit, by which he will be able by turns to address the reason and the passions of mankind ; to vary his language and his voice, according to the subject ; to exert the noble strength of persuasive eloquence, to administer the soft balm of consolation, to utter the harsh thunder of reproof, and to flash conviction on the conscience. These require all the force of oratory, and all the powers of elocution ; joined to a proper action, together with a knowledge of the human heart, and of all the passions and affections of the mind. This is indeed an arduous task, but the glorious prospect of improving the minds of men, and conducting them in the path that leads to a state of eternal felicity, will enable the pious, the humane, the benevolent young clergyman, in some measure, to accomplish it at the university ; tho' he will there have but little help besides the force of his own genius.

To conclude this article, when the young gentleman and his friends find that he is thus qualified, let him with a mind untainted with vice, and a heart glowing with a rational zeal for the honour of God, and a generous love of mankind, undertake the important charge : let him be above all the little distinctions of party, and in the course of his office be more solicitous about the dispositions and actions of his audience, than about empty speculations : let him give the fullest scope to his charity
and

and benevolence, and endeavour to reform mankind, both by the purity of his own life, and of his doctrines.

II. *Of the COUNSELLOR and DOCTOR at LAW.*

THE young gentleman intended to shine at the bar, ought to have a quick apprehension, a lively wit, great volubility of speech, and to be patient and indefatigable in his studies. He should have great command of temper, and a sincere love of justice. He should be above the base art of prostituting his talents, and dressing falshood in the ornaments of truth; of screening the villain, oppressing the indigent, and of using the flowers of rhetoric to evade the force of law, and rob the innocent of their property. These natural talents must be improved by as liberal and as laborious an education as that of the clergyman: They must both learn the languages, and study at the university polite literature, particularly the works of the great orators of antiquity. With respect to this study, the clergyman will have greatly the advantage of the lawyer, as the subjects of which he treats are infinitely more grand and more various, as he has the opportunity of being thoroughly acquainted with them before he addresses his audience,

ence, and is sure of not being contradicted, and of having no new and unexpected arguments to answer. The youth, while at the university, ought to qualify himself for the study of the common and statute law, by reading the celebrated works of those who have written on the law of nature and nations, as Grotius, Puffendorf, and Vatel. He should likewise, for the same purpose, apply himself to the study of the civil law. On his leaving the university, he must enter himself a member of one of the four Inns of Court, that is, Lincoln's-Inn, Gray's-Inn, or either of the two Temples, where he should closely apply himself to the study of the laws of his country. He must be there entered three years, or have paid commons for twelve terms before he is admitted to the bar, which is done after his passing through an examination before the Benchers.

After all, he ought to have a fortune sufficient to enable him to support the character of a gentleman: till he gains practice, which he can never hope to obtain without a large acquaintance, and a considerable number of friends. The engaging modesty which appears so amiable in a church-man, is capable of throwing a veil over his merit; he ought therefore to gain the most perfect assurance possible, and such a command of himself, as never to be ruffled or disconcerted. He ought to have such an
extensive

extensive mind as to be able to foresee before hand all the arguments and objections of the council on the other side; and that quickness of thought and ready elocution necessary to answer immediately without hesitation unexpected and unforeseen objections.

There are particular council who attend the Court of Chancery, though they are admitted of the common law courts; but finding their genius more turned to the study of equity, they confine their practice to that alone. Of this court the Lord High Chancellor is Judge, and the Masters in Chancery his assistants. It was instituted to give relief to the subject, when too severely pressed by the rigour of the Common Law, and to afford what is denied by the forms and rules of the inferior Courts. The Chancellor solely judges by the rules of natural justice, and the dictates of his own conscience, without the interposition of a jury. The form of proceeding is as follows: The party who thinks himself entitled to relief, prefers a bill or petition to the Chancellor, setting forth his case, and containing certain interrogatories relating to it; to which he prays the defendant may make answer upon oath. This bill being filed in the proper office, a subpœna issues against the defendant, ordering him to put in his answer: If he fails within the time limited, he falls under the imputation of contempt

tempt of Court, and is compelled by several writs that terminate in an outlawry. After the defendant has appeared to, and made answer to the bill, the plaintiff may take exceptions to the answer, and oblige him to amend it, till the Court is satisfied that he has answered directly to the interrogatories in the bill: After which issue is joined, and the Court proceeds to a hearing upon the bill and answer; or witnesses are examined, and their depositions taken down in writing. When both parties have finished their proof, the cause then comes to a general hearing, and the Chancellor determines according to equity.

The natural qualifications necessary in a youth who aspires to be a Doctor of the Civil Law ought to be the same as in a Counsellor; and his education the same; except that he ought to be perfectly skilled in the Law of Nature and Nations, the Civil and the Canon Law: He may however be freed from the laborious task of obtaining a considerable knowledge in the Statute and Common Laws of England; in which he will have little or no concern. He receives his degree of Doctor from the university and is empowered by it to plead in all Spiritual courts. His education is expensive; and he ought to have a sufficient fortune to support him till he is able to distinguish himself by his learning and eloquence; and to place him above the temptation

tion of sacrificing justice, honour and conscience for the sake of a fee.

Maritime affairs are determined in the Court of Admiralty by the Law of Nations and the Civil Law, which are nearly connected. The Doctor at Law there pleads as council, not before a jury, but before the Judge Advocate, who determines causes in the same manner as the Lord High Chancellor does in his Court.

The Spiritual Courts in which these Doctors also plead, are guided by such of the Canons as were not abrogated by those acts of parliament by which the reformation was established. Of these Courts the archbishops and bishops are judges in their several dioceses, and preside in them by their delegates. These Spiritual Courts were antiently the engines of popish tyranny and oppression, and they are still considered as a blemish in our constitution: Before them all matters of scandal, adultery, and fornication are cognizable; they grant administration to all wills, and in their courts all matrimonial causes are originally tried. Suits are here commenced by citation; and in cases of contempt they proceed to excommunication. Most of their proceedings are carried on by writing in defences, answers and replies. The depositions of witnesses are taken down in writing, and signed by the deponent. The
judge

judge determines without a jury, and passes sentence on offenders, by church censures and fines.

JII. *Of the* PHYSICIAN.

THE youth intended for the study of Physic ought also to have a very extensive genius, particularly a clear perception, a sound judgment, and a retentive memory. He should certainly have the liberal education of a gentleman; and if designed to commence Doctor, should likewise have the purse of one; since, in younger life he has seldom sufficient practice to support genteely the expence of a family; and the poor physician, like the poor clergyman, or lawyer, is exposed to contempt, the sharpest sting of indigence. To these qualifications should be joined a heart full of probity and tender compassion for his fellow-creatures, with a sound constitution, and no ungraceful person. Though medicine should be his peculiar study, it is by no means to be his only one. He ought to be well versed in the dead languages, and to be skilled in natural philosophy, particularly in anatomy, botany, chemistry, and pharmacy; and if he intends to reimburse by his practice the expence of his education, he should carefully attend to the tempers and dispositions of mankind, and be so much

much master of his own temper, as to bear with the peevishness and impertinence of those whom he attends. With these qualifications, a young man, if he is blest with a solemn countenance, may possibly rise till he lolls in his coach and six, and raises a considerable fortune. But at best this is no more than a bare possibility; for no influence, no affinity, no obligation can force a man on a sick bed to send for a doctor of whose judgment and skill he has a mean opinion. As custom has affixed a peculiar dress to different professions; 'tis certain that if the young Doctor should venture to step out of the common road, and wear his own hair, or a campaign or bag wig, he would find it hard to convince the world; that he was either wise or learned. A large periwig can be but of little help to the intellects of the head it covers; but it adds gravity, and takes away that air of youth, which implying want of experience, is the greatest enemy to the physician's practice. Let him therefore in this respect conform to custom, till he has influence enough to laugh it out of fashion.

C H A P. V.

*Of the several Trades and Mechanic Arts.**Of the ANCHOR-SMITH.*

THE Bolt and Anchor-Smith requires no great share of ingenuity, and only the common education of a mechanic; I mean reading, writing, and arithmetic. Great strength however is absolutely necessary. This is a laborious and profitable branch of the Smith's business. The youth may be put apprentice to it for about 10l. and, when out of his time, if he is a good hand, and can bear the fire, may earn a guinea a week and upwards; and in this business a master may set up with 500l. and employ in it more than 2000 l.

Of the ANVIL-SMITH.

A Boy designed for this trade needs only the common education of reading, writing, and arithmetic; and no great mental abilities are necessary; the whole secret of the art consisting in the just knowledge of tempering the steel he uses. It however requires a considerable degree of strength.

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The Anvil-Smith makes anvils, hammers, &c. for the workers in metals. These are made of iron faced with case-hardened steel, well polished according to the nature of the work for which they are designed. The sums given with an apprentice are from 5 to 20*l*. It is a very profitable business for the master, and like common Smith's work to the journeyman.

Of the APOTHECARY.

IF the Apothecary, according to the original of that profession, only mixes medicines as directed by the Doctor's bill, it requires only a slight knowledge of the Latin tongue, with the names of the several drugs, and the art of compounding them: But if he be considered as performing the office of the physician and the surgeon, in prescribing to patients, and in curing the venereal disease, his natural abilities ought to be the same with those of the doctor, and his education almost equally liberal. He should have a genteel person and behaviour; for one who has naturally the clumsiness, the walk, the air, or the blunt rudeness of a plowman, can never be fit for this genteel profession. The youth who desires to be an Apothecary should also have a clear head, a retentive memory, great readiness of address,

address, an obliging disposition, and a compassionate heart. He should before he goes apprentice be well versed in the learned languages, particularly in Latin; and before he is out of his time should become acquainted with anatomy, botany, and chemistry, and not only know the names, but the qualities of drugs. Where this is the case, he may be considered as a physician who mixes up his own medicines, and acts without a diploma.

Let the parent then who designs to make his son an Apothecary, give him an early and liberal education; and it is proper that in the course of his apprenticeship, or before he sets up for himself, he should attend some anatomic, botanic, and physical lectures, at least for two seasons. I would also advise him to begin, while an apprentice, to take private memorandums, for his own future use, of the cases that fall within his notice, the medicines administered, and their success upon the patient. And thus he will be enabled to rely on his own judgment: But instead of being in great haste to set up for himself, it is most advisable, even though he has a considerable fortune to begin with, to serve a few years as journeyman under a master of great reputation and practice; by which means he will encrease his knowledge, and become better qualified for the humane and noble employment of administering health to the sick. One of the most
essential

essential qualities of a good Apothecary is, that he should be naturally of a compassionate disposition : This, which is his duty, will contribute to his success in business, and his making a figure in life. Let his behaviour upon all occasions be mild and obliging. Let him attend the poor without a prospect of gain ; and, with respect to the rich, instead of swelling his bills by enormous doses, and pompous unavailing recipes, it is much more honest and humane, to charge the medicines in his bill at such a price as will sufficiently pay for his skill and attendance.

The sums given with the youths who go apprentice to this business are from 20*l.* to 100*l.* according to the station and reputation of the master. A journeyman has from 10*l.* to 40*l.* a year, and his board ; and he may set up with 100*l.* But he ought to have money to maintain him till he gets a good set of patients. Apothecaries shops are liable to the visitation of the censors of the College of Physicians, who have power to inspect their medicines, and to destroy those that are bad : But an Apothecary, endued with the least degree of honesty, will always have the best drugs that can be purchased ; since on their goodness depend the health, and even the lives, of his patients.

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At the Apothecaries Hall, in Black Friars, are two laboratories, out of which all the surgeons chests are supplied with medicines for the use of the navy.

Of the APPRAISER.

THE appraising business is generally joined to that of the upholsterer, and of the brokers in household goods; and they are called *Sworn Appraisers* from their having taken an oath to do justice between the parties who employ them. As none are then taken apprentice merely to the business of appraising goods, we need not mention the qualifications of a youth to fit him for it. We shall only observe, that the appraiser ought to join to a good deal of experience in the value of goods of all kinds great integrity and impartiality. Those of this business are employed in cases of death, executions brought upon goods, or of stock to be turned over from one person to another, or divided between partners. They sometimes appraise jointly, each party agreeing to have the same appraiser or appraisers; sometimes, in opposition, each party chusing one or more of a side, and sometimes, by commission, or deputation of trustees, Masters in Chancery, &c. In these cases each of them takes a particular inventory of the goods, with the value of each

each; and when they have gone through the whole, they give their estimates in a gross sum. When different appraisers value against other, if they happen to differ much, they reconsider, and at length commonly come to an agreement. They generally value every thing very low, not out of respect to any of the parties, but because they are obliged to take the goods if it is insisted on, at their own appraisalment, and great part must inevitably lie upon their hands as dead stock; consequently if they gave nearly the value they are of to the consumer or user, they must be losers.

Of the ARCHITECT.

WHenever a youth is destined for this business he ought to have a peculiar taste for architecture, and from the force of genius be able to discover not only the magnificence of buildings richly decorated with ornaments, but that beautiful simplicity, in some other edifices, that only strikes the man of true taste. He should also have a lively and bold imagination. To such a genius ought to be added a liberal education: He should learn at least Latin, French, and Italian; be acquainted with the mathematics, and in particular be skilled in geometry and surveying land. He should early acquire the art of drawing to great perfection; and

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having studied the works of Palladio, Vitruvius, and the other celebrated authors on this subject, should view the most celebrated buildings in England, improve and perfect his knowledge by travelling abroad, every where taking draughts with his own hand of those buildings that are most worthy of his notice, and making proper observations on their beauties and defects. On his return to England, he should make himself a perfect master in the theory of all the arts employed in building, and be acquainted with the secrets of the mason, Statuary, Carver, Bricklayer, Carpenter, and Joiner; be a judge of the materials used by each, and know where the best hands are to be found.

With these qualifications, and an acquaintance with the great, he may be enabled to make a handsome fortune. This acquaintance is not however easily obtained by a professor in any art or science. But the English architect, while taking the tour of Europe, may have frequent opportunities of contracting some degree of intimacy, with those placed by their birth in a rank much above him; by their being related as fellow countrymen, and connected as fellow travellers in a foreign nation: A relationship that is drawn closer in proportion to their distance from home.

The profits of the Architect are very considerable. He draws the plan of a palace, church, bridge,

bridge, or other structure; in which he exhibits the whole building, with all its ornaments; formed upon a scale, with ground plats of the several apartments, closets, &c. Besides these, he generally causes a model to be formed in wood also upon an exact scale: By which the employer has a distinct view of the design. When the gentleman has fixed upon a plan, they agree upon the price; and the Architect either undertakes the whole work for a certain sum, or is only paid for superintending it. In either case, all the master workmen are generally of his own chusing, and such as he thinks capable of properly executing their several branches.

Of the ARMOURER.

OF this trade there are very few in number; there are however some, who are employed in making skull-caps and breast plates for our troops of horse: The company of this name is therefore united with the braziers. They commonly take about 15 or 20l. with an apprentice. Their hours of working are from six to eight; and a journeyman has from 15s. to 20s. a week.

Of the ATTORNEY AT LAW.

THE youth, desirous of being an Attorney, ought to have a clear, solid, and unclouded understanding, indefatigable patience and industry, and a prodigious memory, together with a genteel person, great fluency of speech, and both the behaviour and liberal education of a gentleman. He ought in particular to be acquainted with the Latin tongue; though as all law proceedings are now in English, that language is not so necessary as it was formerly. He should be able upon occasion to express his thoughts in writing, with great clearness and purity of language, and to write with expedition a good bold round hand, and the secretary, or that commonly used in ingrossing. He should also know so much of the old court hands as to be able to read them; and it is absolutely necessary, that he should be well versed in the rules of arithmetic. It is likewise proper that he should understand the old French, and the law Latin abbreviations; for though the use of these is now laid aside, the young clerk will find them of service in case he should have occasion to search court-rolls, or examine ancient deeds: But this knowledge he may easily acquire during his clerkship.

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The young gentleman, who designs to engage in this profession, ought to be possessed of an uncorruptible integrity, and to be above harbouring the thought of gaining money by little mean and low arts: He should be possessed of a fortune sufficient to prevent his lying under the temptation of having recourse to base methods of obtaining money, and have too much humanity and good-nature, to treat a person in distress with disrespect. In short, a parent or guardian ought to be very solicitous to find out a master for him of known integrity, and sufficient practice. This is the more necessary; for the temptations to which the youth will be liable from the example of his fellow-clerks are, in London, so numerous, that if to these be added his master's want of honesty, scarce any thing less than a miracle can save him from ruin.

The sums Attornies take with their clerks are very different: They serve only five years, and ought to be at least sixteen years old before they are bound; but when their clerkship is expired, they are able to get, by acting as clerk to an attorney, little more than a common mechanic. When all these circumstances are considered, it must appear how absurdly those parents act, who having no fortune to give to a son, bring him up to be an Attorney's clerk; and thus force him to be contented with an income more precarious, and not much more

considerable, than that of a journeyman-taylor, or to become a nuisance to society, by being a poor petti-fogging Attorney: An employment equally base, scandalous, and injurious to society.

The good-natured Attorney, who is a man of honour and conscience, not depending entirely on his profession for a support, will have numerous opportunities of saving an unhappy debtor from the miseries of a jail, by fairly and candidly representing his case to the creditor; and, by acting as a mediator, he may frequently prevent troublesome and expensive law suits. An Attorney, who thus behaves, acts up to the dignity of his character, and is a most worthy and amiable member of society. He finds that the integrity of his conduct is attended with the approbation of his own conscience; and that where he seems most to act against his own interest, he most promotes it: He establishes a reputation among the honest and worthy part of mankind, that makes him diligently sought for by every good man who needs his assistance; and as he encreases in wealth, he encreases in the esteem and regard of mankind. Let not any one imagine, that this amiable Attorney is a fictitious character; it is taken from the life; and there are doubtless many others, who are equally an ornament to their profession.

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The knowledge of an Attorney ought to be very extensive: He should be acquainted with all the forms of proceeding in the different courts, and with the nature and names of the several actions; be able to draw up, execute, and register all instruments or deeds, of what kind soever, and to prepare and conduct all proceedings in law. More particularly, he should be able, from his client's information, and the writings put into his possession, clearly to comprehend his case, and to draw up a compendious state of it. He must then proceed to expedite the proper writ against the adversary; and have him served, or attached, according to the circumstances of the action: He then compels him to appear, or enter an appearance; and enters a declaration against him; a paper containing his client's claim, with a conclusion for the recovery of costs and damages: He next obliges his adversary to answer this declaration; and, if necessary, makes a rejoinder and replication. At last, both parties join issue, and a record is made of all the past proceedings, and a rule of court is entered for trial against a certain day. For this he prepares by drawing up briefs for the council; that is, a short, and accurate state of the case, the witnesses names, and the questions to be asked in support of the allegations in the original declaration. After verdict is obtained, he enters upon judgment, and obtains executions against his adversary's person or goods.

He must know how to guard against all the after claps of the law, as writs of error, injunctions, &c. and knowing all the windings and shiftings of this intricate science, guard against all the chicanery and villainy of its professors. From which it evidently appears, that none can be a good Attorney who is not endowed with very extraordinary abilities.

Attornies are distinguished according to the courts into which they are sworn, and of course are admitted attornies of the Court of King's-Bench, Common-Pleas, the Exchequer, &c. and if any one transacts matters in a different court from his own, he must do it in the name of an Attorney of that court.

Of the BACK-MAKER.

THIS trade, of which there are but few masters, requires chiefly strength, with a little ingenuity. It consists in making Liquor-backs. Under-backs, Coolers, Mash-tuns, Working-tuns, &c. for the use of the brewers. The workmanship requires some knowledge both in the carpenter's and the cooper's business. The journeymen work from six to six, and have about 15s. a week; and the masters require 2 or 300l. to enable them to make any figure in business.

Of the BAKER.

THE boy, designed for this useful trade, ought to be of an honest disposition, and both strong and industrious; since the apprentices in London are obliged to carry out great loads of bread by day, and to work hard most of the night. The money given with an apprentice is from 5 to 20*l*. The journeymen have 6 or 7*s*. a week and their board; and a master cannot well set up with less than 100*l*. considering he is obliged to give credit.

Of the BISKET-BAKER.

THIS trade, like that of the common Baker, requires more strength and industry than either learning or ingenuity. The Bisket-bakers, of whom there are not many in London, make Sea-bisket for the use of our merchant-ships, and to sell to those who dispose of them retail. The money given with an apprentice is the same as with a common Baker. The wages given to the journeymen are nearly the same; but the business is more advantageous to a master who has an extensive acquaintance among the masters of ships.

Of the BANKER.

THE person, who would set up as a Banker, ought to be known to have a very large fortune: He should have a great acquaintance among the merchants, and the most wealthy persons in the kingdom; and be particularly esteemed for his honesty and sobriety: He should be well acquainted with the value of foreign coin, and the course of exchange; and be extremely expert in arithmetic, and the counting of great sums in Portuguese and Spanish gold.

From the banker's reputation for wealth and integrity, those who are possessed of more money than they chuse to keep by them, carry it to the banker's; from whom they draw it in such sums as they have afterwards occasion for. The Banker, having thus much larger sums by him than will be demanded in the course of his business, discounts notes for the merchants; deals in exchange, or remitting money from one place to another, and in selling foreign coin; in all which he has considerable profit.

Of the BARBER.

THE boy, intended for this business, ought to be genteel, active, and obliging; to have a sweet breath, and a light hand. The business of a Barber is shaving and making perriwigs: The former requires these qualifications; and the latter, some ingenuity, to imitate all the various fashions introduced by the folly of mankind. But in this trade little learning is necessary; reading, writing, and the common rules of arithmetic being sufficient. There are however some Perriwig-makers who do not shave.

The Barbers and Perriwig-makers also make a kind of Perriwigs for the Ladies; among which they have imported a sort, impudently called by the French, as if they intended to affront all the fair who wore them, *Tête Moutons*, or Sheep's-heads: But the English ladies, from their complaisance for that nation, wear the wig, give it the French name, and pocket the affront.

Cutting and curling of hair is also another branch of the Barber's business; though others apply themselves wholly to it, and are therefore called Hair-cutters. The wages of a journeyman Barber are but small; but if he has a good set of acquaint-

ance, and can be settled in a shop advantageously situated, he may set up with 50*l*. However, as he must give credit, he will soon have occasion for a larger sum of money, to enable him to carry on business in a handsome manner. The Barbers take with an apprentice from 5 to 20*l*.

Of the BASKET-MAKERS:

THERE are several sorts of Basket-makers:

Some who form Baskets of green osiers, chiefly for the use of the gardeners. These are the most considerable branches; for some of the masters employ many hands, and also rent large other plantations; which not only produce sufficient for themselves, but many to spare. This part of the work requires no other abilities but strength and application; and a journeyman may earn from 10 or 15*s*. a week. About 100*l*. will set up a master very handsomely; but some of them employ much more.

Another sort of Basket-makers make finer works with rods stripped, split, shaved, and dyed; or with cane split, or straw dyed of various colours. The workers in these finer sort of baskets, which are chiefly to be found in the turner's shops, require less strength and more ingenuity. Many women are employed in making these smaller wares;
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and, all things considered, earn as much money as at trades that make a greater figure in the world. The sums given with an apprentice are from 5 to 10*l*.

Of the BEDSTEAD-MAKER.

THE boy, designed to be a Bedstead-maker need not have either much learning or ingenuity; it is a very ordinary branch of the carpenter's business, and may be learned in a very short time. The only requisite, in an apprentice is strength of body. It requires no great sum to set up a master; but he must give credit to the upholsterer. Journeymen in this business have usually 15*s*. a week.

Of the BELL-FOUNDER.

THOSE of this business are generally employed in founding Bells for churches; and consequently there are few of this trade. It requires some art and ingenuity properly to mix up and make the Bell-metal, to form the mould in the ground, and to fix the core to fill up the hollow part of the inside, so as to give every Bell the exact tone and sound intended, as the treble, tenor, bass, &c. Some knowledge in geometry, and the mechanical powers, is also necessary, to form the Bell,
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and manage with ease such heavy bodies. The business is profitable, but precarious; for one of this business alone cannot expect to be so constantly employed as those in other branches of foundery, especially as the small Bells in houses are generally cast by the Brass-founders.

Of the BELLOWS-MAKER.

THIS is a very useful and extensive business, Bellows being not only made for families, but for organs; for blowing fresh air into mines; and for carrying on a great number of mechanic arts, in many of which they are of very different sizes and constructions, and some of them prodigiously large. It is a profitable business for the master, who may set up in a tolerable way with 50 or 100*l*. They take 5 or 10*l*. with an apprentice; but the usual wages of a journeyman are no more than 10 or 12*s*. a-week.

Of the BIRD-CAGE-MAKER.

ONE of this business has occasion for very little learning, and no great strength; but it requires some ingenuity to be able to perform in a masterly manner all the different kinds of work done

done by the Bird-cage-maker. With respect to Cages, they make some of several guineas value. They also make all traps and gins, sieves and screens formed of wire; and some of the shop-keepers deal largely in wire itself. They usually take 5 or 10 *l.* with an apprentice, who, on commencing journeyman, will be able, if he is a good hand, to get 15 or 20 *s.* a-week. A master in the shop-way may set up with 100 *l.* but if he engages in the wholesale wire trade, he ought to have at least 3 or 400 *l.* There are very few of this business in *London*; and most of the shops are in *Crooked-lane, New-fish-street.*

Of the BLACK-SMITH.

THIS artificer makes the iron-work used about buildings, and the coarser part of kitchen-furniture, as pokers, trevets, &c. he also mends such iron utensils as happen to be broken. The Black-smiths now give themselves the general name of Smiths; theirs is a laborious business, which chiefly consists in the management of the fire, the hammer, and the file. Those designed for it require but little learning; for reading, writing, and common arithmetic are sufficient: but they should have great strength of body; and if they are active and ingenious, these qualifications will frequently

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be of great use to them, as they often meet with very puzzling and difficult jobs. From 5 to 10 l. is given with an apprentice; and a master may set up with 50 l.

Of the BLACKWELL-HALL FACTOR.

THOSE of this business act by commission from the manufacturers of the different kinds of woollen cloth in the country, but more particularly for the merchants and dealers in cloth in town; to supply whom, they contract for large quantities of the various kinds of cloth in the counties where they are made, which they deposite in *Blackwell-ball, Basinghall-street*, where there are separate places appointed for each Factor; and from thence they sell them to the Merchants and Retail-dealers. The education required for an apprentice in this business, is only writing and accompts: he ought, however, to have a good fortune, for these Factors take from 100 to 400 l. with a clerk or apprentice; and he should have a considerable sum to enable him to begin the world with reputation.

Of the BLOCK-MAKER.

BLLOCKS are a very material article in a ship's rigging; the making them, therefore, is a useful employment, and requires more ingenuity than
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most people imagine ; for if they are not made exactly to fit each other, the ship works heavily, and gives the sailors much fatigue and labour. There are not many masters in this business ; but those who are complete workmen may be sure of a comfortable support. They take with a lad 10*l.* or more, and they work from six to eight. They are not much exposed to the weather, working always under cover. A journeyman gets 15*s.* or, if a good workman, 18*s.* a week. It requires 2 or 300*l.* of cash or credit to set up master.

Of the BLOCK-HEAD MAKER.

THIS is a trade, of which there are very few masters. They make the wooden heads on which Barbers dress their wigs, either for home-consumption or for exportation. The heavy part of the work requires no nicety ; but as the front of the Block bears some resemblance to the human face, the master or finisher ought to understand something of carving, tho', if we judge by the manner this is generally executed, we must think this qualification is totally neglected. However, I imagine, if a young man, capable of carving a good head in wood, was to apply himself to this business, he might be sure of success ; as it is not to be doubted but the Barber would rather have his wigs appear

appear to advantage on what bore some likeness to the human form, than on the resemblance of a monkey or a monster. I believe, as this business is engrossed by a few hands, they seldom take apprentices; but I think, with the above talent, any worker in the small-wood way, such as a Turner, or Joiner, &c. might become a successful master.

Of the BLUE-MAKERS.

? **T**HEY make Blue of indigo mixed with cheap materials for the use of the Calicoe-printers and Dyers, and for bluing of linnen when washed; but have nothing to do with the fine colours used in painting. It is a laborious business, and is imagined to hurt the nerves. Those who keep shop get a good living: they take with an apprentice from 10 to 20 l. but they give but low wages to a journeyman, who works from six to eight.

Of the BOAT-BUILDER.

THIS trade is divided into several branches; each workman keeping to his particular kind of Boats. Those for the use of ships are by far the heaviest work, and require strong lads. The wherries or passage Boats are lighter work; but both laborious, and stand in need of care and exactness.

actness. The trade is not overstocked with masters or journeymen. They work from day-light till dark in winter, and from six to seven in summer. When employed, they are under cover; but as they work at the water-side, they are exposed to many a keen blast. They have from 5 to 20l. with an apprentice; who, when out of his time, may get 15 s. a week. It requires several hundreds to set up masters in a tolerable way.

Of the BODICE-MAKER.

THIS was once a trade of universal use; but now Bodice are worn by none but the poorer sort of women and girls in the country. They are made of canvas and whale-bone, or cane, and sometimes of leather; but these last are almost out of use. Women are principally employed in making them; they can get six or seven shillings a week, and require no great qualifications. Their apprentices are generally parish children, whom they take with little or nothing. As their dealings are mostly in the country, they require a pretty large stock; most of them now deal also in ordinary stays, by which means they make a handsome livelihood.

Of the BOOKBINDER.

OF this business there are several sorts, as the calves leather binder, the vellum, and the sheep's leather binder.

The boy intended to be a calves leather binder, ought to be both strong and pretty ingenious, in order to become perfect master of the several branches of the art of binding books in calf: But no extraordinary education is necessary; reading, writing, and a little arithmetic being sufficient. This trade requires strength to beat the sheets smooth with a heavy hammer, and ingenuity in gilding and neatly lettering the back, as well as in beautifully marbling the edges of the leaves; but this last is a part of the art known to few of the trade; and those make an extraordinary advantage of it.

The Vellum Binder is chiefly employed in binding shop-books in vellum or parchment; he also rules paper for the account-books. His is the most profitable branch of binding both for the master and journeyman.

The Binder in sheep is chiefly employed in binding of school-books, and little books in gilt paper for children, and requires no genius.

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The calves leather Binder may set up a master with about 50*l.* and his journeymen have seldom more than 12*s.* a week, except they are very curious and uncommon hands, and are employed by a master distinguished by the neatness of his work. The vellum Binder may become master with even less money; or get 15 or 18*s.* a week by working as a journeyman. The sheep Binder may begin trade for himself with about 30*l.* but the journeymen can seldom earn more than 10*s.* a week. All these branches take about 10*l.* with an apprentice.

Of the BOOKSELLER.

THE youth intended to be a Bookseller ought to have a clear understanding, a taste for literature, and a liberal education. The Booksellers may be divided into the following classes: 1. The wholesale dealer, who subsists by his country trade, and by serving some of our plantations. 2. Those who deal only or principally in bibles, common prayers, almanacks, &c. who are also wholesale dealers. 3. The retale dealers, who generally deal in new books. 4. Those who deal chiefly in foreign books. 5. And those who sell old books.

It is necessary that the youth who is put apprentice to any of these branches, should write a good hand, and be very expert in the practice of the
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common rules of arithmetic. But this is not all : A young man, who will have a fortune of only one or two hundred pounds, should not be put apprentice to a person in either of the two first classes, who are wholesale dealers ; of whom he will learn nothing but the manner of packing up parcels, and the titles of those books for which there is the greatest demand in the country : As this is all he will learn in his apprenticeship, he will be almost as unfit to set up as a retail trader, as if he had been entirely unacquainted with bookselling ; and not having a fortune to set up as a wholesale dealer, must be contented to be a journeyman.

The third class is that in which a sensible young man, of 1 or 200l. fortune, has the fairest chance for improving it.

Those who are to be put apprentice to a dealer in foreign books, which are exported from abroad, ought to speak French with great fluency, and to write it with ease. He who would be put apprentice to one who deals chiefly in old books, and for that purpose buys valuable libraries, ought to speak both French and Latin with great ease, before he is put apprentice : This will be of considerable service to him ; as he will be enabled not only to converse with such foreigners as may happen to be customers ; but will the more readily become acquainted

quainted with the valuable works of the antients, and will facilitate his knowledge of the most admired editions of the classics.

The Booksellers are indeed the nearest allied to the three learned professions of any of the trades that depend on buying and selling; their education and sentiments ought then to be proportionably more liberal than those of other trades; and this is really the case with respect to all who deserve the name of Booksellers. But this trade is much overstocked, by the numbers who have thrust themselves into it, without any of those qualifications that are essential to a Bookseller, a gentleman or an honest man: Some of whom are so far from having a taste for literature, that they can scarcely read an English title.

Booksellers of reputation take with an apprentice from 20 to 40*l.* and pay their journeymen about 20*l.* a year with their board.

Of the BOWYERS.

THough this is one of the city companies; and was doubtless five hundred years ago as considerable a business as the Gun-smith is at present, yet it now subsists only in name; and this company

ny is entirely composed of trades very different from that of Bow-making, for which there is now no use.

Of the BOX-MAKER.

THIS business consists of making up boxes and cases for packing; and may be learnt by a boy of the meanest abilities. The work is in general as light as the joiners; but it requires neither nicety nor judgment. There are many shops of this trade in the city furnished with boxes of all sizes; which are bought by the merchants and wholesale dealers, and used for packing up goods to be sent abroad or into the country. They have usually 10l. with an apprentice, and pay a journeyman about 15s. a week. 100l. will enable a young man to furnish himself with a sufficient quantity of materials, and to fit up a shop with a good assortment of boxes.

Of the BRASS-FOUNDER.

THE boy intended for this business should have a strong constitution and a robust body, in order to endure the heat of the fire and the fumes of the metal; besides the common education necessary to every body, it would be of advantage to him if

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he learned to draw before he went apprentice ; for this would enable him when he set up as a master to design for himself, and frequently to make his own moulds:

There are various sorts of Founders : Those who only cast for the braziers shops : others who cast buckles, studs, and bars for the saddlers ; those who cast for the coach-makers, and the like ; but all work upon the same principles, and only apply themselves to particular branches because they are not furnished with moulds for other articles : Thus the Founder who casts knockers, brass knobs, candlesticks, sconces, branches, &c. is furnished with moulds and instruments proper to these articles ; but if he is desired to cast eschutcheons for a chest of drawers, he cannot do it : Not that he is ignorant of the manner ; but because he must make a mould for that purpose, which is not worth his while, unless he had a greater demand for them. It is a profitable business for the master ; and a journeyman earns about 15s. a week.

Of the BRAZIER.

THE work of the brazier requires strength and ingenuity, as they form all the vessels of brass and copper that are beaten out and rendered hollow

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by repeated strokes of the hammer; such as porridge-pots, tea-kettles, sauce-pans, frying-pans, warming-pans, &c. They also make use of fire; but it is only in soldering and tinning their vessels. It is a dirty laborious business. A master may set up with about 100 l. and usually has 10 l. with an apprentice; who, if he happens to be a good hand, may earn about 15 s. a week.

The Brazier, who keeps shop, not only sells every thing made by the working Brazier; but many of the articles made by the Brasses and Iron Founders, and the Smiths. In his shop we find stove grates of all fashions; fenders, shovels, tongs, and pokers of polished iron, steel, or brass; candlesticks, snuffers, smoothing irons, box irons and heaters; locks of all sorts, hinges of various kinds, and different materials; French plate, finely enamelled waiters, and snuff-boxes.

The Brazier, who keeps such a shop, neither makes, nor is supposed capable of making all the different articles he exposes to sale: It is sufficient that he is so much of a working Brazier as to be a judge of all the works of that kind; and so much of a Founder, Smith and Enameller, as to know when goods are turned out in a workmanlike manner. He generally purchases his goods of the masters of the several classes, and his profit arises from
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the difference between the buying and selling price. A person, who keeps such a shop, ought to be acquainted with many mechanic arts; he should be well versed in accounts, and ought to have 7 or 800l. at least to stock a shop handsomely. He has seldom less than 20l. with an apprentice.

Of the BRICKLAYER.

THE previous qualifications of a boy designed to make a figure as a Bricklayer, are more considerable than is generally imagined. He should have a good genius, and before he is put apprentice, should learn not only arithmetic, but be taught trigonometry, geometry and drawing, and after his being bound should spend some time in the study of architecture, in order to know the just proportion of doors, windows, arches, &c. Indeed the common work of the Bricklayer is merely ranging his bricks with great truth upon each other; but, by such an education as is here recommended, he will be enabled to draw plans, and to survey and estimate buildings, an essential part of the business of a master. The Bricklayer takes with an apprentice from 5 to 20l. according to the degree of business he is in. The common wages of a journeyman are 2s. 6d. or 3s. a day; but as they work in the open air, they are obliged to be idle several

months in the year. A master may set up with 100l. but if his business encreases fast, he will soon employ six times that sum. He is paid by the employer so much for every yard of brickwork, either with, or without the materials, and his is a very profitable business, if he works for others; and therefore he is under the less temptation of launching out into building projects of his own, by which Bricklayers are frequently ruined.

Of the BRICK-MAKER.

THE making of Bricks and Tiles is performed at many places round London, where the masters rent clay grounds for that purpose. They seldom or never take apprentices; but the poor boys hired to assist the men, learn one part of the business after another, till they understand the whole, and become journeymen; when they are paid by the thousand, according to the sorts they make; there being ten or a dozen different kinds of Bricks and Tiles. These journeymen, if good hands, are said to be able to get 4 or 5 s. a day in dry weather; but when it is wet or frosty, they are obliged to stand still. It is a profitable business to the master; few of whom employ less than 500l. in it.

Of the BREECHES-MAKER.

THOSE of this trade have within the last twenty years greatly encreased in reputation and business; from the great improvements they have made in leather Breeches, by causing them to be dyed of all colours, and fitting them to the part they are intended to cover with as much neatness as the most expert taylor: So that they now appear as handsome as cloth, with the advantages of being softer to the touch, and more durable. Hence the masters live more genteely than formerly, and yet save money. It requires little strength of body; but some ingenuity is necessary, especially in cutting out the leather to advantage, and to fit exactly the customer. The masters take 10 l. with an apprentice; and the journeymen, whose working hours are from six to eight, earn 12 or 15 s. a week.

Of the BREWER.

THE youth designed for this business ought to write a good hand, to be well versed in accounts, to understand gauging, and to be possessed of a handsome fortune. The Brewery is a very flourishing trade divided into several branches; as

that of Brown or Butt Beer, and Common Ale, which is by far the largest; that of Pale Ale, commonly called Two-penny; and that of Table-beer; in brewing of which many carry on large Brew-houses. The whole art to be required, consists in experience in the manner of working, in being a judge of the goodness of the Malt and Hops, and in the constant attendance of those who have the direction from the mash-tun to the store-cellar: But the apprentice will have little labour; all the dirty heavy work being done by labourers who have ten shillings a week and their small beer.

The sums given with an apprentice are from 50 to 300 guineas, according to the reputation of the master in trade. When the apprentice is out of his time, he either sets up for himself; is taken in partner, and has a share in the business, in proportion to the cash he is able to advance; or serves as a brewer's clerk; few of whom have less than 50l. a year, and some 200l. The sums necessary to set up a London Brewer are from 2000l. to 10,000l.

Of the BRIDLE-CUTTER.

THIS is a business set up to serve the saddler, in the same manner as the leather-cutter is set up for the service of the shoe-maker; and his business

ness differs from that of the leather-cutter (who cuts out and retails the leather for shoes) in his cutting out and selling only the leather for saddles and bridles to the saddler who makes them up. This business requires no great genius in the youth who is to be put apprentice to it, nor any extraordinary education. But as the masters are obliged to give credit, they ought to have 2 or 300l. to enable them to carry on trade.

Of the BROCADE-WEAVER.

WEAVING Brocades or silks flowered with various colours, and enriched with gold and silver, is a very ingenious business, performed in Spital-fields, where it is brought to the greatest perfection; the silk stuffs made there of this kind greatly exceeding in their richness and the beauty of the patterns those made in France. But though this art requires great ingenuity; a journeyman cannot earn above 12 or 15 s. a week. But were boys to learn, before they go apprentice, to draw foliages, flowers, birds, &c. they might doubtless, when become journeymen or masters, obtain considerable advantages by drawing their own patterns. Some of the masters are very wealthy. The sums given with an apprentice are from 5 to 20 l.

Of the BROOM-MAKER.

THE Makers of Birch or Heath Brooms are confined to about half a dozen masters who live in Kent-street, Southwark, and return several hundreds a year in this trifling article; some of them having upwards of 500 l. stock constantly by them, deposited in their yards in great stacks of brooms of a prodigious height. I do not find that they take apprentices: Their work is done by men and poor women who it is said get from 8 to 16 s. a week.

Of the BRUSH-MAKER.

THIS business requires no great degree of strength, nor any extraordinary ingenuity to become fully master of it; and it is intirely independent on his education, which if it be ever so liberal, cannot enable him to improve the art. The Brush-maker makes Hair Brooms and Brushes of all sorts. The principal part of his materials are hogs bristles, which he picks, combs, and cuts into lengths fit for the various kinds of Brushes. The wooden part of the Brush or Broom he forms with an instrument much of the nature of that used by the

the last-maker. From 5 to 10l. is given with an apprentice, and the journeyman earns from 12s. to 15s. a week. Their hours of working are from six till nine. A Brush-maker may employ in trade from 50 to 200l.

Of the BUCKLE-MAKER.

THE making of common Shoe and Knee Buckles is an easy business, fit for a lad of slender make, whose friends have little money to spare, as the masters seldom take above 5 or 10l. with an apprentice, who must work from six in the morning till nine; but when out of his apprenticeship may earn 15 or 20s. a week; and with a little money he may buy tools, commence master, and work for the shops. This business however requires some fancy to invent new fashions.

Of the BUCKLE-CHAFE-MAKER.

THE making of Buckle Chafes and Tongs is a separate business by itself; and may be learnt without much strength or abilities. The masters take from 5 to 10l. with an apprentice; who, when out of his time, may with a small sum set up for himself.

Of the BUCKRAM-MAKER or STIFFNER.

THERE are but few of these, and they are mostly about London. The cloth of which Buckram is made for the most part comes from Scotland: It is coarse, thin, made on purpose for this use, and is stiffened by being several times wetted with a glutinous matter, and afterwards pressed or calendered, to make it smooth. This business requires more strength than ingenuity. The masters take 5 or 10*l.* with an apprentice; and give their journeymen 10*s.* a week, who work from six to eight. It requires 200*l.* and upwards to set up master.

Of the BURNISHER.

THIS artificer works for the silver-smith. He burnishes plate with a tool prepared for that purpose, and with oil and whiting. He works from six to eight; and takes 5 or 10*l.* with an apprentice.

Of

Of the BUTCHER.

THE trade of the Butcher is necessary, though not to be chosen for a boy of delicate sensations, or a promising genius; and yet it requires strength of body, courage, and more skill in the masters than is generally imagined: For they must not only learn to kill without pity, but how to buy a bullock, calf, or sheep standing; to form a judgment of the age, weight, and fatness by the eye, in which they are liable to be deceived without long experience; and to cut it up to the best advantage. They are divided into several classes: As,

The Carcase-Butcher; who is a kind of wholesale dealer. He buys many live cattle at a time; kills and flays them; and then sells the carcases whole, ready for cutting up. Some indeed sell not only whole carcases, but halves and quarters. These sell to the poor butchers, who cannot afford to buy many live cattle.

The next are the great retailers; who buy their cattle alive; kill and sell them in joints. Some of these sell chiefly beef; others only veal; others mutton and lamb; others only pork; these last are

called Hog-butchers; and many of them sell all sorts of meat.

The Butchers have 5 or 10l. with an apprentice; and give a journeyman 10 or 12l. a year, with his board: But there are very few of these. The slaughtermen are paid by the head; and some of them will earn 4 or 5 s. in a day or night: But theirs is far from being a constant employment.

Of the BUTTON-MAKER.

THE greatest part of the Mohair, Silk, and Horse-hair Buttons are made in the country, and sent up to the shops in town; those made here are chiefly Livery Buttons, or some patterns particularly bespoke. Those who work at this branch are chiefly women, who are paid by the dozen, and are able to get but a poor living.

The boy or girl designed for the business of making Gold and Silver Buttons, ought to have some fancy and genius, that they may be able to invent new fashions; they should also have good eyes and a dry hand. The laceman furnishes them with all the materials for his Buttons, except the moulds, and pays him for the work when done. They take with apprentices 5 or 10l. and may earn 12 or 15 s. a week.

a week: Women and girls are principally employed.

There is another species of Button-makers. These make them of metal in variety of patterns; they are now much in use, and are mostly made in the country by the artificers in hard ware, and sold at the shops where their other articles are vended. This branch requires neither much strength nor ingenuity; they being punched or stamp'd with a tool on which is marked the ornamental impresson of the Button. They take from 5 to 10 l. with an apprentice, and give but poor wages to journeymen. There are other kinds of Buttons in which stones are set; the making of these is a branch of the jewellers business.

Of the BUTTON-MOULD-MAKER:

THIS employment requires very little education or skill. The moulds are made of horn or wood by a hand engine. It is a very poor business; and requires so little to set up, that I imagine there are few or no journeymen. Their apprentices are generally the children or orphans of the lowest poor; and they therefore have nothing, or only what the parish gives with them: Tho', I make no doubt, but with sobriety and industry, they can get a comfortable living.

Of the BUTTON-SELLER.

THESE are shop-keepers who deal in all sorts of Buttons covered with Silk, Mohair, Horse-hair, or Worsted. They generally sell sewing silk, thread, twist, and other little materials used by the taylors. It is a good shop-keeping business, and in but few hands. Some employ a great number of people to work for them; and have been known to raise good estates. They require with an apprentice from 20 to 50 l. in proportion to the master's circumstances in trade. A young man ought to have at least 300 l. to enable him to set up master, and may employ four times as much.

Of the CABINET-MAKER.

THE youth intended for this business, ought to be able to write a good hand, understand arithmetic, and have some notion of drawing and designing. It requires more ingenuity than strength; a nice eye and light hand are absolutely necessary, as he is by far the most curious workman in the wood way. His success as a master must depend on the delicacy of his fancy and the neatness of his work. All sorts of furniture made of mahogany, walnut-

walnut-tree, plain, carved, veneered, or inlaid, go through his hands. The carvers, chair-makers, and dealers in brass ornaments are employed by him, and he has a profit out of their labours. Those who work only for the shops, and keep no goods by them, take ten pounds with an apprentice, who, when out of his time may commence such another master with only a chest of tools of the value of eight or ten guineas and a little wood; but they who keep shops and vend their own goods to the consumer, or for exportation, have more with a lad; who will require a few hundreds if he sets up in the same manner.

Of the CALENDER.

THE Calenders make smooth and set a gloss upon silk, stuff, and linnens, by means of a heavy engine called a calender, which is worked by horses or men. It is a hard laborious employ, but requires few qualifications besides strength. Their principal employers are the linnen-drapers and dyers, from whose shops they are obliged to fetch heavy burdens. There are not many in this branch of business; the master gets a decent living; but the journeymen are no better off than other labourers. A lad ought to be well grown before he is put apprentice

prentice to this heavy work. He may learn it for 10 l. or under; and set up master for 50 l.

Of the CALICO-PRINTER.

THE youth intended to make a figure as a master Calico-Printer, ought to have a taste at least for painting, that he may be able to give proper instructions to the pattern-drawer, to the cutter of his blocks, and to be a judge of the colours proper to be impressed upon the cloth, or laid on with the pencil. The pattern is first drawn with all its colours, the whole breadth of the cloth; after which it is divided into several parts about twelve inches long, and eight inches broad; each distinct part of the pattern is then cut out upon wooden blocks; in which what is not to appear is cut away, and the surface left represents the figures. The cutter of the blocks having thus finished his works; the cloth to be printed is spread even over a piece of flannel on a table, and the blocks, being covered with their proper colours, are one after the other placed with the painted carved work upon the cloth, and a stroke upon each impresses the colours, and leaves the impression upon the cloth; each colour being printed separately. In this manner they begin at one end of the piece, and proceed gradually to the other; leaving no vacancy between. In
some

some curious patterns the impressions are embellished by other colours laid on with a pencil. When the whole piece is thus finished, the cloth is washed, to take off the dirt it may have contracted in the operation; after which it is dried, calendered and folded up fit for the shops.

In this manner cloth printed with one or many colours is performed, and finished when the ground is white; but if the ground is to be of any other colour; as, for instance, yellow, the figures are waxed over on both sides, and the linnen died, when the whole is yellow except the parts covered with the wax. There has lately been a new improvement made in the art, by printing some fine cottons from copper-plates, which have a good effect. Indeed the business of printing linnens has within these last twenty years been greatly improved; but they cannot equal the Indian chints in the beauty of their tints. And yet it is said, that most of these Printers have some secrets in the preparation of their colours, which they never reveal even to their apprentices, unless forced to it.

The printing of linnens is a very profitable business; but it requires a large sum of money to set up master; and likewise a good stream of water. The sums given with apprentices are from

from 20 to 2 or 300l. and a journeyman may earn 25 or 30s. a week.

Of the CAP-MAKERS.

TH E S E are shop-keepers who make and sell velvet caps for men or women to travel in; as also mens morning caps. They deal in many sorts of millinery goods, as ladies hats, bonnets, cloaks, cardinals, short aprons, hoods, handkerchiefs, or almost any thing made of black silk or velvet. Their apprentices ought to be smart girls of a genteel appearance; they should work well at their needles, and be ready accomptants. Their friends must give with them from 10 to 30l. in proportion to the trade carried on by the mistress. They serve only five years; and are kept the first part of their time close to the needle. Those, who cannot set up, may get 15 or 20l. a year and their board as journeywomen; they being qualified not only to serve Cap-makers, but may be shop-women to the milliners, the haberdashers, or to any buying and selling trade proper for women.

Of the CARD-MAKER.

TH E making of Playing Cards is a very easy business, and requires neither judgment, strength, nor ingenuity. It consists of pasting several

veral sheets of paper upon each other; and then printing off this Card-paper from wooden blocks: After which, the Court Cards are coloured, the paper glazed, and the cards cut out. They take from 10 to 15 l. with an apprentice; and about 100 l. will enable him to set up master.

Of the CARMAN.

THE boy designed to be a Carman ought to be strong and healthy, on account of his being obliged to lift and carry heavy weights, and being exposed to the inclemencies of the weather. The principal of them in the city are employed in carrying good, from the wharfs to the merchants warehouses, &c. There are also many hundreds employed by the timber merchants, dealers in coals, &c. Those, who take apprentices, have about 5 l. with an able lad of eighteen, who, when a journeyman will have 12 s. a week and some perquisites. The expence of setting up master of a cart, including two horses, and the purchase of a number, will require 100 l. But I would not advise those parents, who are so wise as to consult the morals of their children, to think of putting them to this business; though some of the masters, who have several numbers, save money.

Of

Of the CARPENTER.

THE boy designed for this business should have a strong robust body and hail constitution, a solid judgment, and, besides the ordinary education of reading, writing, and arithmetic, ought to be well skilled in geometry, particularly in the mensuration of solids and superficies, and the manner of supporting spacious roofs without the assistance of pillars or columns, He should also have some knowledge of the mechanical powers, in order to lift heavy weights: But this last may be learned while he is an apprentice. He is employed in all the strong wooden work of buildings, from the foundation to the top. Where the foundation is soft, the Carpenter drives piles, in order to support the edifice; he places bearers where the chief weight of the building lies; he lays the joists, girders, and rafters in flooring; and when the outward case is built, raises the roof, and prepares it for the tiler. The Carpenter ought to be able to act not only by the mechanical rules of his art, but to strike out of the common road, where the case requires it, as it frequently does in propping of old decayed buildings. His chief study is strength; and to dispose his work in such a manner, as that a building

building may not be weighed down with what is designed for its support.

Besides these qualifications, a Carpenter, who is a master-builder, ought to be a good draughtsman, and be able to draw plans, and to survey and estimate the expence of buildings; and also have a good sum of money to enable him to buy materials and give credit. Without these qualifications, the youth must be contented with the prospect of being a jobbing master; which does not require a great deal besides tools. Carpenters take with an apprentice from 10 to 20*l.* Journeymen have commonly 15*s.* a week; and it will require from 50 to 500*l.* to set up a master.

Of CARPET-MAKING.

THERE are a species of Carpets made of list of various colours; and mostly used by the sides of beds. These are sold at the turners shops; and are made by people who do nothing else. This work, which is but a late invention, is mostly performed by women, who earn from 5 to 8*s.* a week.

Of

Of the CARPET-WEAVER.

THE weaving of Carpets is chiefly performed at Wilton; and is an ingenious and profitable branch. These Carpets are sold in London at the Carpet warehouses and by the upholsterers. The journeymen employed in weaving them earn from 15 s. to a guinea a week. A manufacture of most beautiful Carpets has also been set on foot at Chelsea; and the Carpets and Tapestry made there, are said to exceed in beauty the finest of those brought from Turkey. The youth designed for this business ought to understand drawing, and be well acquainted with painting, and the disposition of lights and shades.

Of the CARVER.

CArving is a very ingenious art, divided into several branches, performed by the Chair-carver, the Coach-carver, the Frame-carver, the House-carver, and the Ship-carver; all which being separate businesses may be seen under their several articles.

Of

Of the CAT-GUT-SPINNER.

CAt-gut is a necessary article in several trades; as in the making of whips, the stringing of violins, &c. But yet Cat-gut-spinning is a very mean, nasty, and stinking trade, that requires no genius or abilities. None but the poorest children are put apprentice to it; and, when out of their time, they are able to earn only a very mean support.

Of the CHAIR-CARVER:

THE boy designed for the business of a Chair-carver ought to have a taste for drawing, and some skill in the practice of it. The Chair-carver is employed not only in carving Chairs, but also bed posts, testers, and any other furniture that passes through the hands of the upholsterer and cabinet-maker; by whom he is generally paid by the piece, according to the pattern of the work; and may earn thirty or forty shillings a week. The masters take from 10 to 20*l.* with an apprentice. As a taste for carved work in chairs and other furniture prevails, the ingenious men among these kind of Carvers are never out of business.

Of the CHAIR-MAKER.

THE Chair-makers formerly used to deal in nothing but chairs, and were frequently employed by the Cabinet-maker or upholsterer; but now they keep large shops themselves, and sell almost all kinds of household goods; such as Tables, Chests of Drawers, Looking Glasses, &c. as well as Chairs of all sorts. It is a very good business; and a sober ingenious man need not fear employment. They make the frames of all kinds of Chairs, and employ other hands to bottom them, with velvet, silk, stuff, leather, or matting; cane being now entirely out of use. The boy designed for this trade ought to be strong and ingenious; the work is pretty laborious; they are employed from six to nine; and must have at least 10 or 15l. given with them apprentice. When out of their time, they can get 15s. a week. A master requires some hundreds to enable him to set up and furnish a handsome shop.

Of the CHANDLERS-SHOP.

THOSE who keep these shops sell in small quantities many things used in the kitchen; as butter, cheese, vinegar, mustard, brickdust, small-coal,

coal, tea, sugar, small beer, &c. But they take no apprentices, and keep no journeyman.

Of the CHASER.

THIS is an ingenious branch of business; it being the raising of figures upon the cases of watches, tweezers, the lids of snuff-boxes, and other toys; which is not done by casting, but is chased or imbossed. This is performed by having the figures to be chased cut deep in a piece of steel, and a thin plate of silver or gold being made of the proper form, and laid upon a piece of lead, the piece of steel, on which is the impression, is fastened to the end of a spindle, and is pressed with great violence upon the metal, when the lead giving way, and the gold or silver being pressed into all the interstices of the mould, swells into every hollow, and takes the impression of every figure. The ingenious Chaser ought to be a very perfect master of drawing, especially small figures, in order to design his own moulds or stamps for the steel engraver.

The Chasers business is divided into several branches; among which, that of chasing gold watch cases is one of the most profitable. The masters take from 10 to 20l. with an apprentice;

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who,

who, when out of his time, may earn upwards of 20 s. a week, or with 100 l. may set up master.

Of the CHEESEMONGER.

THE boy designed for this business is under no necessity of having any extraordinary abilities; for as it merely consists in buying and selling, nothing more is necessary than writing a pretty good hand, and the knowledge of the common rules of arithmetic, together with honest principles and an obliging behaviour. The Cheesemonger is a retailer of cheese, butter, bacon, and hams, and sometimes of eggs. His business is liable to several accidents, which are unavoidable; for, notwithstanding his utmost care, every commodity he sells suffers by being kept too long. His cheese lose their weight, his hams stink, his bacon grows rusty. These are great drawbacks on his profits; however, where there is a good trade, and a quick return of money, the Cheesemonger has a fair opportunity of growing rich. Those of this business take with an apprentice from 5 to 50 l. and a person may open a shop with 100 l. Though; if he deals wholesale, he may soon want ten times that sum.

Of the CHEESE-FACTOR.

THE Cheese-factor travels into the various counties of England famous for Cheese, as Cheshire, Suffolk, &c. and buys Cheese by commission of the farmers and dairy-men. They are frequently wholesale Cheesemongers. As factors I think they take no apprentices.

Of the CHEMIST or CHYMIST.

THE youth designed for a Chemist ought to have a solid judgment, a good constitution, and a large share of patience, to enable him to go through long and tedious processes, that often depend upon minute circumstances; he should be a curious observer of nature, and unwearied in his application: But, above all, he ought to give the strongest testimonies, that he will prove a man of honour and conscience. For the Chemist has many opportunities of imposing upon the public, by his knowledge of the secrets of nature, and his being able to imitate by art natural productions so nearly that their difference is not to be discerned by the nicest eye or palate. By this base and cruel practice, many of them acquire great sums of money; and thus, for the sake of amassing wealth, not only cheat the public, but endanger the health and even the life of the patient, by selling fictitious for natural, or sophisticated for sound and duly prepared

drugs. Men like these dishonour the profession; and ought to be ranked in the class of robbers and murderers.

The education of a boy designed for this business ought to be liberal and unconfined: He should be master of the Latin tongue; and perhaps he would not find his time ill employed in learning the German; as that nation is generally allowed to produce the best Chemists in Europe; and the most excellent treatises on that subject are wrote in Latin and German. He can scarce be fit to be put apprentice till he is sixteen years of age, which is young enough for him to be instructed in Chemical Preparations, or in dealing out drugs in a shop; when a mistake proceeding from rashness or ignorance may be fatal.

The Chemists frequently compound and sell medicines; and are subject to the visitation of the College of Physicians. They take from 20 to 100 l. with an apprentice; who may set up master in a handsome manner with 500 l.

Of the CHILD'S-COAT-MAKER.

THIS branch of business is generally performed by women, and is a pretty profitable employ. They take 10 or 15 l. with a girl; who ought to be ingenious, handy, and a tolerable needle-woman.

man. The boning part is hard work for the fingers ; but the rest is easy enough. As the apprentice must appear neat and genteel, and, when out of her time, must depend on a good acquaintance, this trade is not fit for the children of people in low circumstances ; but for those a little above the vulgar it is a very proper one. A journey-woman may get 1 s. a day in summer ; but they are generally out of business some of the winter months.

Of the CHIMNEY-SWEEPER.

HIS is a very disagreeable, though a necessary, business : Some however live very comfortably and save money. They all take apprentices : And the younger they are the better is it for the master ; since they are the fitter to climb narrow chimnies. These infant apprentices are parish children, who are thus made to provide for themselves sometimes before they can speak plain. They commonly serve fourteen years ; and, when out of their time, generally commence masters : For there are few journeymen of the business.

Of the CHINA-MAN.

HE principally deals in foreign China, but sometimes in glass and the finer sorts of home made earthen ware. This is reckoned a genteel business, and requires a large stock to set up, especially if the China-men sell tea, as many of them do. Their apprentices,

prentices, like those in most mere shop-keepers families, live easy lives, the menial servants doing the drudgery; and I believe they take none with less than 40 or 50l. and some in great business require upwards of 100l.

There have of late years been several successful attempts to imitate the Porcelain, and some have been made extremely beautiful; but it will not in general keep of a pure white, when long used. However, that manufactured at Bow in Essex answers extremely well, when covered with a full colour; and there is a great demand for it in plates, sauce-boats, and chimney ornaments. That made at Chelsea holds its colour better, and in the beauty of the painting greatly exceeds the foreign.

Of the CHOCOLATE-MAKER.

AS the making of Chocolate is hard work, mostly performed over a charcoal fire, which is apt to affect some constitutions, the boy who is to be put apprentice to it, ought to be strong and hardy. Chocolate is made of a fruit called Cacao produced in the West-Indies and other parts of the world. This is a kind of nut about the size of a walnut, which being stripped of its thin shell is worked upon a stone, till it is equally mellow, and then put into tin moulds in which it hardens, and from them receives the form of cakes. To perfume it they mix it with veneflo.

About

About 50*l.* will set up a master who sells only retail; but, if he has considerable dealings, he may employ in trade several hundreds.

Of the CLASP MAKER.

THOSE of this business make Clasps for some school-books, almanacks, pocket-books, and letter-cases, which are chiefly of brass, and sometimes of silver, in various forms. Some of them also make letter-cases; and these last likewise small silver locks and keys. The art of Clasp-making has been lately much improved. The Clasp-makers in general take 5 or 10*l.* with an apprentice; and, in the common way, 20*l.* will be sufficient to set up a master.

Of the CLAY-FIGURE MAKER.

THE youth designed for this business ought to have a genius for this art, and all the qualifications of a statuary; and this genius may be early discovered by the boy's taking great delight in forming the figures of men and animals in soft materials. To cultivate this inclination, he should be early learnt to draw by the best masters. He ought to have a liberal education; and, after he is out of his time, should spend some years in the academies of Italy.

Those of this business form models for the statuaries, and make busts in clay. In doing this last,

they work from the life ; and instead of taking off the face, as is done in busts of wax and plaister of Paris, they mould their clay while the person sits as if for his picture ; and the likeness thus finished by a fine hand, is much more lively and striking than if done in wax or plaister, and much more valuable ; for a good bust of this kind is worth ten guineas. They take about 20l. with an apprentice ; and about 100l. will enable him to set up as master.

Of the CLOCK-MAKER.

THE boy, who has an inclination to become a Clock-maker ought, besides the common education, to acquire some knowledge in mechanics : A study that will be of no small use to him in his business, in which several of the mechanical powers are united. The Clock-maker's employment has a near resemblance to that of the watch-finisher ; but as the parts he is obliged to touch up and join together are much larger, they do not require so nice a hand. The masters take with an apprentice from 10 to 40l. The journeymen should lay out 15 or 20l. in tools ; and may earn 20 or 30s. a week, and it will require one or two hundred pounds to set up shop.

Of the CLOTH-WORKER, or CLOTHIER.

THIS business requires strong and robust lads for apprentices : It properly consists of weaving woollen cloths. There are not indeed many
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of these in London: But as the Cloth-workers are one of the city companies, they deserve a place here. They take about 20l. with an apprentice; the journeymen earn from 12 to 15s. a week; and it will require from 500 to 2000l. to set up master in London.

Of the COACH-MAKER.

THE boy designed for this business ought to be possest both of strength and ingenuity; and if he intends to be a master when his time is expired, he should have a very handsome fortune, on account of his dealing with persons of quality and distinction, who frequently require long credit. The Coach-maker makes the body of the Coach, and all the carriage, except the wheels; and his business is compounded of that of the carpenter, shoe-maker, and taylor. As a carpenter, he forms the body and carriage of wood; as a shoe-maker, he covers the top and sides with leather, in which he is sometimes obliged to use his awl; and as a taylor, he lines the inside with velvet, cloth, or other materials, in which he is obliged to use his needle; and he puts together the several parts made by other artificers. His is a very profitable business both for the master and the journeyman. He expects 20l. with an apprentice; who must work from six to eight; in which hours a journeyman, who is a good hand, may earn four or five shillings.

A master may set up with 500*l.* but it will require 2000*l.* to carry on a considerable business.

Of the COACH-BUCKLE-MAKER.

THIS artificer is a species of the smith; for he is solely employed in making iron Buckles for the harness of coaches. These he forges with the hammer; files them, blacks them, or, if required, lacquers them, to give them the appearance of brass. This is but a poor business, in which every man is said to be his own master, and may be so without any ingenuity; but, by close application, he may get sixteen or eighteen shillings a week. They take about 5*l.* with an apprentice; and 5 or 10*l.* will set up a master.

Of the COACH-CARVER.

THE boy, who is desirous of being put apprentice to this business, ought before he goes apprentice to learn to draw, and to be pretty expert in representing naked boys, festoons of fruit, flowers, and other ornaments; but has no occasion for perspective, or any rules relating to lights and shades. Those of this business are employed by the coach-maker in ornamenting with carved work coaches, chariots, landaus, &c. and apply themselves to no other branch of carving. They work from six to eight; take from 10 to 20*l.* with an appren-

apprentice; and 50l. will enable them to set up. A journeyman may earn thirty shillings a week.

Of the COACH-CURRIER.

THE coach-maker deals with a Currier, who dresses leather for no other use. There is no great difference between the manner of dressing coach leather and that for shoes and boots, except in substance. This Currier buys up skins for this purpose and no other, and finds his account in dealing only with the coach-makers, who allow him pretty large profits; but he is obliged to give great credit. This is a greasy stinking business, and requires strength. The Coach-currer takes 10 or 20l. with an apprentice; who, when out of his time, may earn fifteen or twenty shillings a week as a journeyman; but it will require 200l. to set up master, and 2000l. to give the credit necessary in a great way of business.

Of the COACH-FOUNDER.

THE Founders, who are solely employed in working for the coach-makers, cast the ornaments on the corners, the brasses for the body, the hinges for the doors, the buckles for the harness, and all the other decorations made of brass or any other cast metal used about coaches. They are furnished with moulds for all the cast work used about coaches; know how to make moulds for new

patterns when required ; and work in all respects upon the same principles as the other Founders, from whom they only differ in the particular works cast. The profits of the master and journeyman are much the same with those of the other Brass Founders; and the strength of constitution, and the genius required are also the same.

Of the COACH-HARNESS-MAKER.

THIS is an artificer that requires very few abilities, and more strength than ingenuity. His business has some resemblance to that of a shoemaker, as he works with an awl and waxed thread; but both the master and the journeyman have much larger profits. A boy may be put apprentice to this business for 5 or 10l. and 100l. will set him up as a master; but if he chuses to work as a journeyman he may earn fifteen or twenty shillings a week.

Of the COACH-PAINTER.

THE boy, who is desirous of being a Coach-painter, ought not only to learn to draw, but to acquire some knowledge of heraldry: Though this last part of his education may be learnt during the time of his apprenticeship. A principal part of his business being to draw coats of arms, he ought also, during his apprenticeship, to make himself acquainted with the genealogy of the principal

pal families of the kingdom, and be able to blazon their arms ; he should likewise learn all the terms used in heraldry, so as to be able to paint the arms of a gentleman from a verbal description. The art of the Coach-painter also extends to the painting of agreeable devices, foliages, and ornaments of all kinds. It is a profitable business to the master, who takes from 10 to 20 l. with an apprentice ; and the journeymen may earn three or four shillings a day.

Of the COACH-WHEELER.

THE Coach-wheeler is employed in making the wheels and carriages of coaches, chariots, chaises, &c. and is a laborious business. The boy who is put apprentice to it ought to have strength and activity. It is profitable to the master ; who may set up with one or two hundred pounds. He takes 5 or 10 l. with an apprentice ; who, after he is out of his time, may earn from 15 to 20 s. a week.

Of the COAL CRIMPS.

THESE are a kind of Factors who sell ship loads of coals by commission to wholesale dealers, as wharfingers, lightermen, &c. They take 100 l. and upwards with an apprentice, whose business is chiefly that of a clerk ; and ought therefore to write a good running hand, and to be well versed in accompts. To these clerks, when out of their time, they give 50 l. a year and upwards.

Of the COAL-MERCHANT.

THE Coal-merchant contracts for coals being brought to the port of London, and sells them to private families and retail dealers ; but never less than a chaldron at a time. They take one, two, or three hundred pounds with a clerk, who must be master of his pen ; and, as they must give credit, require a considerable sum to carry on trade for themselves.

Of the COFFEE-HOUSE-MAN.

AS the Coffee-house is a place in which gentlemen meet to drink coffee, tea, or chocolate, to converse with each other, and to read the news, it requires waiters who are courteous, active, and obliging. The youths taken for this purpose are seldom bound apprentice ; and when they are they do not give more than 10*l.* to this business. The waiters at these houses have sometimes wages, and sometimes none, their perquisites in many places being very considerable, and more than sufficient to find them in cloaths.

Of the COFFIN-MAKER.

THE making of Coffins is a distinct business by itself ; but the masters are also undertakers of funerals. This business requires no other abilities but those of strength and activity ; though the under-

dertaker ought also to add an obliging behaviour, and a grave deportment. As the making the wood work of Coffins may be considered as a branch of the carpenter's business, the journeymen have nearly the same wages as the carpenters. The masters take about 10*l.* with an apprentice; and, as they are obliged to keep Coffins of all sizes constantly by them, it will require about 100*l.* to set up.

Of the COLLAR-MAKER.

THIS is a mean and nasty business. He flays dead horses, cures their hides, and makes them into collars for carriage horses, traces and other harness. A boy intended for this business ought therefore to be strong and healthy, and of no squeamish stomach. The Collar-maker takes from 5 to 10*l.* with an apprentice; who with 50*l.* may set up master; though he may employ 200*l.* in his trade: But a journeyman has little more than the wages of a common labourer.

Of the COLOUR-MAN.

THOSE of this trade prepare and sell all sorts of colours, paints, oils, and varnishes, for the use of Painters, Japanners, &c. for which purpose some of them keep large shops and warehouses. The Colour-man buys the simple colours, compounds some of them, and grinds such as require it.

This

This is a very profitable branch of trade, though hazardous to the health, especially if the boy is not particularly careful to keep himself clean; and therefore it is not at all fit for weakly constitutions. The Colour-man ought to have a very good eye, and to make himself a complete judge of colours, to know all their properties, and the common tricks used to sophisticate them; not to impose upon his customers; but that he may guard against the imposition of those who would impose upon him in the goods they sell to him.

The Colour-men confine themselves to what relates to painting: But they not only serve the house-painters with all their colours and brushes, but the liberal painters with their fine colours, pencils, brushes, and canvas fit for drawing upon. They take with an apprentice from 10 to 30 l. and give a journeyman who understands the business of a shop 20 or 25 l. a year and his board. But the grinding of their colours is performed by labourers at 10 or 12 s. a week; and some of the more common sorts, as white lead, are usually ground by a mill: From hence it happens, that most of the apprentices, bred up in these shops, not being able to set up in their own business, which would require at least 200 l. turn journeymen house-painters.

Of the COMB-MAKER.

THE making of Combs is divided between two branches; the Ivory and the Horn Comb-makers. The Ivory Comb-maker buys the Ivory plates, rasps them to a proper thickness, and saws the teeth. They also make Combs of Box, Tortoiseshell, and sometimes of Horn; in which case, they buy the Horn ready prepared.

The Horn Comb-maker cuts the ox's horn into pieces of several rings, and flitting each, when hot, pulls them open, and then pressing them between hot iron plates till they are of a proper thickness, shapes them, and afterwards saws the teeth. The Horn Comb-maker does not make Combs of Ivory, Tortoiseshell, &c. Each of these branches take from 5 to 10 l. with an apprentice; and 50 l. will enable a young man to set up master. Those who keep shops usually sell all these sorts; though, with respect to the makers, their employments are kept distinct.

Of the CONEY-WOOL-CUTTER.

THIS is a very profitable business to the master; though it requires no extraordinary genius; but he ought to be versed in accounts, and have at least 3 or 400 l. to begin trade for himself, which is the more necessary as there is business but for few

few journeymen. The Coney-wool-cutter buys not only rabbit skins, but the furs of beavers, &c. and employs women first to pluck off the long straggling hairs, and then to cut off the fine wool that grows underneath; which is done with such dexterity that the wool of every rabbit adheres together as if it was still joined to the skin. They in the same manner cut off the fur of beavers, &c. The fine wool or fur of these beasts is sold in sacks to the hatters at so much a pound for making hats. The masters take from 20 to 40l. with an apprentice.

Of the CONFECTIONER.

THIS is a very slavish and unwholsome business; and therefore the boy who is put apprentice to it ought to have a strong constitution; for the working part is not only fatiguing, but performed in close places; and much of it by ovens and over charcoal fires. It also requires much ingenuity; for the Confectioner builds walls, castles, and pyramids of Sweetmeats, and arranges them in a thousand different forms. One of this business takes with an apprentice from 20 to 40l. The journeymen who work at the business earn from 15 to 25s. a week; a shopman has 20l. a year and his board; and about 300l. will set him up.

Of the CONVEYANCER.

THOSE who profess this business are generally bred attornies, but apply themselves chiefly to the drawing of deeds, mortgages, and conveyances of estates: This is one of the most profitable branches of the law; especially when they add to it, as they commonly do, the trade of a money-scrivener; in which case, they are employed to find out estates to purchase, have money to lay out for some, and are employed by others to borrow; thus they are paid both by the borrower and lender; and of course are also employed to draw the securities.

This business not only requires great knowledge in the law; but a solid and clear understanding, and much integrity; for the security of property greatly depends on this species of lawyers; and the villainy or ignorance of those of this profession occasion most of the law suits brought into Westminster-Hall: On this account a gentleman cannot be too cautious in the choice of a Conveyancer. The business is however engrossed by a few, who soon get estates. In putting a young man to this profession, the greatest care should be taken of the character of the master to whom he is bound as a clerk: For this will not only contribute to the preservation of his integrity; but be the most effectual means

means of recommending him to business when his clerkship is expired. The Conveyancer receives with a clerk from 50 to 100*l.* and upwards.

The COOPER.

THE Cooperage is an extensive business in all its branches, and consists of those who make all sorts of tight casks for holding liquids, and those who make casks not tight, chiefly for dry goods, package, and soap. Both these are smart work; but the former is by much the most difficult task: They generally take 10 or 20*l.* with an apprentice, whose working hours are from six to eight; in which time some good hands will earn 3*s.* or 3*s.* 6*d.* but the common wages of the journeymen are 15*s.* a week. To set up a master in the dry way will require from 200 to 500*l.* except they keep to soap-casks only, as some do, which is easier work, and requires less money. One who keeps to the making of butts, hogsheds, &c. for brewers, vinegar-merchants, shipping, &c. requires a great stock of the best staves, and of course more money to carry on his business. But there are those also who work mostly on the lesser sort of tight casks; which is much lighter work, and takes less money.

Of the COPPER-SMITH.

THIS business requires great strength. The Copper-smith makes coppers, boilers for brewers, and all manner of large vessels of Copper and Brass. His business differs from the Brazier's in the largeness of his work, and in his rivetting many Brass or Copper Plates together, in order to form the prodigious vessels that pass through his hands.

Those of this noisy business take with an apprentice from 10 to 20l. pay their journeyman from 12 to 20s. a week; and 100l. will set up a man in this business; but he may soon want 1000l. to enable him to carry it on with spirit.

Of the COPPER-PLATE-PRINTER.

THIS article might have been joined to that of the Engraver, to which it is nearly related; but, as it is a separate trade, and very few of the Engravers keep Copper-plate presses in their houses, we thought proper to place it here. When the plate is ready to be worked off, the Copper-plate Printer rubs a kind of ink made of lamp black and oil all over it, and placing it upon a grate over a small charcoal fire, works the ink in a moment into the smallest strokes of the graver. The ink on the surface of the plate is then lightly wiped off with a rag; and the workman, touching the palm of his hand

hand with a little whiting, with a slight stroke, cleans the surface of the plate, while all the ink continues in the lines made by the graver. It is then placed upon the press, where a board slides between two rollers, and a piece of paper well wetted being laid upon the plate, it is brought under the upper roller, which pressing a piece of flannel upon the moistened paper, makes the latter sink into the smallest scratches made on the plate, and take off the whole impression by imbibing the ink. All this is done with such expedition, that a large plate of a whole sheet is blacked, cleaned, and worked off, in less than a minute. The Copper-plate Printer takes from 5 to 10l. with an apprentice; who, when a journeyman, will be able to get 12 or 15s. a week. This business is a very black and dirty one; but a person may set up master with about 50l.

Of the CORK-CUTTER.

CORK is the bark of a tree of the same name, which grows in Spain and other countries. This bark is half burnt by the Cork-cutter, and then, with a sharp knife, cut into Corks for bottles, bungs for barrels, &c. The business requires no genius nor abilities; and is mostly performed by women, who earn seven or eight shillings a week, at so much a dozen of Corks. The masters take from 5 to 10l. with an apprentice; who when out of his time may set up with 50l.

Of

Of the CORN-CHANDLER.

THOSE of this business sell all sorts of Corn by retail, or to the immediate consumer; and for that purpose keep shops. They deal very largely with the keepers of livery-stables, and with those gentlemen who keep horses. They take apprentices; and it requires 3 or 400l. to set up a good shop. The apprentice ought to write a good hand, and be master of the common rules of arithmetic.

Of the CORN-FACTORS.

THESE gentlemen act as Factors both for the farmer and the buyer. They sell at the Corn-Exchange in Mark-Lane, by sample, and send it to other parts of Great-Britain or Ireland, where Corn is scarcer and bears a better market. They take with apprentices 40l. and upwards. The youth intended for this business ought to write a good hand, and be well versed in accompts.

Of the CURRIER.

THIS is a black greasy business, and requires no other abilities in the youth designed to be put apprentice to it besides strength. The Currier dresses leather for shoes, boots, saddles, &c. and some of them work only for the Coach-makers; but of these last we have already given an account. The common Currier takes with an apprentice from 10 to 15l. and pays his journeyman 15s. a week. To set up master will take from 200l. to 500l.

Of

Of the CUTLER.

THE business of the Cutler is forging, tempering, and mounting all sorts of knives, forks, razors, scissars, sheers, &c. The Cutlers in London keep shop. It is a trade which affords large profits to the master, who may set up with 50*l*. though he may find it necessary to encrease his stock to 2 or 300*l*. value. The journeymen earn the common wages of 12 or 15*s*. a week: and the masters take from 5 to 20*l*. with an apprentice. As this business does not require any extraordinary degree of strength, a boy of the ordinary growth may be bound at thirteen or fourteen years of age; and his education may be as mean as that of any other mechanic; but if he is to serve in the shop, writing a good hand, and the knowledge of accounts will be absolutely necessary.

Of the DESIGNER.

THE Designer is employed by the author or bookseller in drawing draughts of the plates intended to embellish a work; as the representation of some interesting passage of history, or an emblematical frontispiece, &c. to be copied by the Engraver. This business is frequently performed by the History painter, and sometimes by an Engraver well skilled in drawing; and there are few or none who make it their sole employment. Though some find it a valuable branch of business.

The

The Designer draws his figures exactly in the same manner in which they are to be engraved, and shades them with Indian ink. He ought to draw with great accuracy and beauty, and to be a perfect master of the doctrine of lights and shades. He should be acquainted with the rules of perspective, understand history, and in particular be well versed in the heathen mythology. To these qualifications should be added a lively imagination, and, what is essentially necessary, a genius and taste for the polite arts. Thus qualified, the ingenious Designer may earn from half a guinea to a guinea and upwards a day.

Of the DIAL-PLATE ENAMELLER.

THOSE of this business make enamelled Dial-plates, which they sell to the watch-makers. They take the brass plates, cover them with white enamel when wet, mark the numerals, and fix the enamel by fire. They take from 10 to 20 l. with an apprentice; and a small sum will set up a master, who may make a comfortable subsistence of this branch of business.

Of the DIAMOND-CUTTER.

THE Diamond-cutter differs from the Lapidary only in his cutting no other jewels but Diamonds, while the latter is solely employed in cutting

ting jewels of less value. The cutting of Diamonds is performed by the help of an engine and Diamond powder; and the skill of the workman consists in the manner of cutting the Diamond, so as to conceal its flaws, if it has any, in giving it its full lustre, and cutting it in such a manner as it may make the greatest shew, and lose least of its weight. This is not a laborious branch of business; it is profitable to the master, who commonly takes about 10l. with an apprentice. The journeymen earn from 15s. to a guinea a week; and about 100l. will enable one of them to commence master.

Of the DISTILLER.

THE London Distillery is divided into two branches; that of the Malt Distiller, of which there are very few in number, but those are prodigious dealers; they use an amazing quantity of Malt, and employ vast sums of money in trade. The others are the Compound Distillers, who buy their Malt Spirits of the former; and distilling them again with other ingredients, make Gin, Aniseed, &c. They also make a kind of Brandy, by distilling from Molasses.

The Malt Distiller causes the Malt to be ground and mashed, as if for brewing ale; the wort is taken off, and without being mixed with hops, is
put

put to cool in backs. When cool it is drawn off into working vats, and fermented with yeast. This being done, it is put into a still, which is made about three parts full, and the fire is kept pretty brisk, till the liquor is almost ready to boil; when the head of the still is put on and luted to the worm, which passes through the worm-tub: the fire is then allowed to decrease till the Spirits begin to run; and is kept in a constant slow heat till the whole is drawn off. The first production, which is called Low Wines, is again put into the still, which with the worm ought to be well cleansed; and being drawn off a second time produces pure Malt Spirits.

These Malt Spirits the Malt Distiller sells to the Compound Distillers; who put a quantity of Anniseed, Juniper Berries, or other materials, into the Malt Spirits lowered with water; and then distil as before. This produces those liquors so fatal to the morals of the poor, called Anniseed and Gin.

Molasses Spirits are distilled from treacle by the Compound Distillers: Here the Molasses are diluted with water to a proper thickness; then warmed, fermented with yeast, and worked in the same manner as is done in preparing for the distillation of Malt Spirits. When thoroughly fermented and distilled, it also obtains the name of Low

Wines; and is distilled again in the same manner as Malt Spirits.

The Malt Distillers take 3 or 400l. with an apprentice, who requires as many thousands to become master. The Compound Distillers take between 20 and 40l. with an apprentice; they allow a journeyman 20 or 30l. a year and his board, and require 500l. at least to set up master.

Of the DRAPERY-PAINTER.

THE boy designed for this business, which is the lowest degree of a liberal Painter, ought to learn to draw, and to form a just knowledge of the nature of lights and shades; and this may serve as a sufficient preparatory for his being put apprentice; when, if he be bound to a proper master, he will learn, though he has no very extraordinary genius, to obtain a tolerable notion of painting in general, a sufficient knowledge of colours, and the manner of mixing them so as to relieve and set off each other; and to exhibit the folds of a garment in such a manner, as to shew the materials of which it is composed, whether woollen, linnen, silk, or velvet.

The Drapery Painter is employed by the Limner; who having finished the face, given the figure its proper attitude, and drawn the out-lines of the Dress or Drapery, sends the piece to be clothed
by

by the Drapery Painter; for a Portrait Painter, if well employed, has not time to clothe his figures. Though this business does not require a very great genius, yet those who are eminent in their way, and employed by a celebrated Limner, may frequently earn a guinea a day; and yet take only from 10 to 20l. with an apprentice.

Of the DRUGGIST.

THE Druggists buy up all manner of unpounded drugs, both foreign and domestic, which they sell again to the apothecaries; and most of them also compound drugs for sale in their own shops like the apothecaries. The Druggist is, however, by his trade only supposed to know so much of the nature of drugs as is necessary to make him him distinguish the good from the bad of every species, and to know the true and genuine from the counterfeit. He only buys them as a merchant, and disposes of them as commodities, of which by his business he is not supposed to know the intrinsic virtues. The Druggist in this light requires neither great abilities nor learning; but if he attempts to compound them, and to sell medicines ready prepared, he should have a liberal education, that he may know what he is doing; and that his want of skill may injure none but himself. The business of the Druggist is, without his interfering with that of the apothecary, very profitable; but it requires upwards of 500l. to set up a master, and

some of them employ 2000*l.* in trade. They take from 20 to 100*l.* with an apprentice; but few journeymen are wanted; and those who are employed receive 15 or 20*l.* a year. The Druggists, as well as the apothecaries, are under the inspection of the College of Physicians.

Of the DRY-SALTER.

THE Dry-Salters deal mostly in colours for the use of the Dyers. They are very few in number; but are great wholesale dealers. They take with an apprentice from 50 to 300*l.* and it will require at least 1000*l.* to set up the young man, when he is out of his time.

Of the DYERS.

THE Dyers are divided into the Woollen Dyers and the Silk Dyers; the former are also subdivided into several branches; among which, the Scarlet Dyers business is the most ingenious and profitable. The business of all the Dyers in the woollen way is in general laborious and dirty; they are obliged to lift great weights, and to be constantly dabbling in hot dies and cold water: but the Silk Dyers are not so much exposed to the weather, nor to the inconvenience of dabbling in cold water as the other. The youth, who is to be put apprentice to this last business, may therefore be of a less hardy constitution. None of the branches
require

require any very extraordinary abilities, nor any thing more than a common education, as reading, writing, and accounts. Most of the branches take from 10 to 20l. with an apprentice; who, when out of his time, may earn half a crown or three shillings a day; and it will require from 100 to 500l. to set up master.

Of the EARTHEN WARE SHOP:

THE Persons who sell Earthen Ware have some of them very considerable dealings, and carry on a wholesale trade in all Earthen Ware, which they buy in Holland, at the pothouses near London. Some of them also deal in Chelsea and Bow China, and in all Glass Drinking-Vessels. Those who keep these shops take from 5 to 20l. with an apprentice; and to set up in a handsome way will require one or two hundred pounds.

Of the EDGE-TOOL-MAKERS.

THERE are a peculiar class of workmen who make edged tools for several different kinds of mechanics, as Chissels, Gravers of all sorts, the Instruments used by the different kinds of Carvers, the iron and steel work of Hatchets, Axes, Gimbets, &c. great part of which are made in the country, though some of the best are made in town; and a tolerable living is got by them, both by the

masters and journeymen. They take from 5 to 10*l.* with an apprentice, who may set up with so small a sum as 5*l.*

Of the EMBROIDERERS.

THIS business is performed by women, and is an ingenious art. The girl, who is to be put apprentice to it, ought to have a dry clean hand, and a genius for drawing. She should be taught not only to draw flowers, &c. with great facility, but to have a just notion of the principles of light and shade, that she may range the colours in a natural order, and make them reflect a beauty on draw, the pattern drawer marks the pattern on the work itself, which the Embroiderer fills up with gold and silver thread, silks, or worsteds. They take 5 or 10*l.* with an apprentice; who, when out of her time, may set up mistress, if she has a good interest with the great, or with the saddlers, taylors, and milliners who work for them.

Of the ENAMELLER.

ENamelling is a curious art; and in some of its branches requires a genius for painting, and the art of drawing to great perfection. What renders it still more difficult for the Painter in Enamel to succeed in his work is, that he cannot be a judge of all the colours he lays on by the eye; and therefore

fore he must colour and shade the piece by his idea of the metallic colours as they will be changed by fire; when many of them will be entirely different from those laid on with water. Copper or gold are the metals commonly used to enamel upon; but copper most, as it can bear the greatest heat before it is brought to flow. The art of Enamelling Pictures has been lately facilitated by a very easy invention. If a number of enamelled snuff-boxes, or other things, are to have the representation of a piece of history, or a curious emblematical device; the piece is drawn on paper, and then engraved on copper, or at least all the out-lines, and principal touches. This copper-plate is work'd off upon paper in brown or other coloured ink; and as soon as it is printed, the impression is laid while still wet upon the enamel, and pressing it close, the impression is taken off: the picture thus printed upon the enamel is painted with metallic colours, and afterwards, when thoroughly dry, put into the furnace; when, if it be done well, it will appear nearly as beautiful as if the figures had been drawn on the enamel with a pencil. This is an expeditious method, because two thousand snuff-boxes, &c. may be thus printed from the same copper-plate. The Enameller takes with an apprentice from 10 to 20*l*. and the youth may become master at the expence of between 50 and 100*l*. The business is very profitable; for a good workman may have almost any

price for his work; and a journeyman who can draw and paint well may have thirty or forty shillings a week.

Of the ENGINEER, or ENGINE-MAKER.

THE youth designed for this business ought not only to have a genius for mechanics; but to understand all the laws and principles of the five mechanical powers, the wedge, the lever, the wheel, the screw, and the pulley; for on the combination of these powers depends the construction of all forcing Engines whatever: He should also learn mathematics and drawing; be possessed of a clear and solid judgment, and be master of these branches of knowledge, before he is put apprentice.

I shall not here treat of the Military Engineer, but of the artist employed in making Engines for raising water, which is a very extensive business. He makes those curious machines which raise water by fire, either for draining mines, or supplying reservoirs. He makes Engines to force water to any height, either for the domestic use of families, or for extinguishing fires. This artist employs smiths of various sorts, founders for his brass work, plumbers for his lead work, and workers in leather to make his leathern pipes: And his business requires not only an acquaintance with the gentry, but

but a considerable sum of money to set up with. It is in few hands; and is not capable of maintaining many masters, whose profits are very large: They take from 10 to 20l. with an apprentice: The workmen in the several branches they are employed in earn from 15 to 20s. a week; but the foreman of a shop, who has the above accomplishments, and understands the construction of Engines, may earn much more.

Of the ENGRAVER.

THE youth, who chuses the business of an Engraver, ought to have a good eye, a steady hand, a genius for painting and drawing, a lively imagination, and a fertile invention. Little strength is necessary in this branch of business; but, like all other sedentary employments, it requires a sound constitution. The boy, who is desirous of becoming a great artist, ought to learn to draw very early; to be acquainted with painting, and to be a perfect master of the doctrine of light and shades. The business of the copper-plate Engraver may, with respect to the manner of working, be divided into two parts; Engraving and Etching. Engraving is performed in the following manner: The work is drawn and shaded with Indian ink; the copper-plate is bought perfectly polished, and is slightly rubbed over with wax; the drawing is then laid with the face upon the plate, and both passed

through the rolling press, by which the impression of the drawing is taken from the paper upon the plate. The plate having thus the marks of the piece to be engraved, with all the shades, the outlines are cut with a graver, and the different shades formed by lines traversing each other.

Etching is performed in the following manner: The work is drawn and shaded on paper as before; and the plate prepared in the same manner, only the wax is laid on thicker; and the impression, being as above taken off the paper, remains visible upon the wax; but now, instead of using the graver, the artist traces the lines of the figure, and those designed for the shades, with a needle fixed to the end of a little bit of stick, going no deeper than the wax, and making scarce any visible impression on the copper. When the whole impression is thus traced, a small kind of wall of shoemakers wax is raised round the edge of the plate, so as to prevent what is poured upon it running off, and aqua fortis, being poured over the plate, is suffered to remain till it has eaten a sufficient depth into the scratches and lines made by the needle. An impression being thus made in the copper deep enough to represent the distant hills and figures, the aqua fortis is poured off, the plate is cleared from the wax, rubbed with an oiled rag, and the nearer figures, which ought to appear darker and bolder in

in the print, are again sketched out, and touched up with the graver; when the whole being finished, a proof is drawn off at the copper-plate press, and all the errors or over-sights being corrected by the graver, the plate is ready for being worked off.

The business of an Engraver is generally divided into several branches: thus those, who engrave maps, generally engrave nothing but the maps and words, and send the ornament, which surrounds the title, to be done by another hand: those who engrave ornaments and other devices, seldom engrave portraits; and there are some who engrave only landships.

There is another species of engraving prints, called Metzotinto: This is more properly called Scraping; and being entirely different from those methods of engraving already mentioned, will be described in its proper place; as will also seal engraving under the article Seal.

The engraving of plate, sword blades, &c. which are separate businesses from that of the Copper-plate Engraver, is performed much in the same manner; and therefore does not need a particular description.

The Copper-plate Engraver has from 20 to 80 l. with an apprentice; and a journeyman, who is esteemed

esteemed a tolerable hand, may earn 30s. a week; and some, who are extraordinary workmen, earn half a guinea a day : They are generally employed all the year round ; and have this advantage, that it requires very little money to set up master.

The Engravers of silver and gold plate take from 10 to 20l. with an apprentice ; and the best hands earn about 30s. a week.

Of the EXCHANGE-BROKER.

THE Exchange-brokers act by commission from the merchants, and sell ship-loads of goods, divided into lots. They generally join to this business that of the Ship-brokers, both being usually carried on by the same persons ; and both goods and ships are sold by them at the coffee-houses near the Royal-Exchange by inch of candle. Some Exchange-brokers deal largely on their own account ; and foreseeing what goods will be wanted, send letters to our plantations, buy them there, and having them brought to England, sell them by auction. It is a very profitable business, and requires great knowledge in trade ; but these brokers take no apprentices.

Of the FAN-PAINTER.

FAN-painting is an ingenious business, and requires skill in drawing, in perspective, in the proper disposition of the lights and shades, and in laying

laying on the colours. This business is however almost ruined, by the introduction of printed Fan-Mounts ; and therefore it would be a pity that any ingenious girl, who has a taste for drawing, should be put apprentice to it.

Of the FAN SHOP.

IN these shops nothing is sold but Fans and Mounts ; they are generally kept by women, who employ themselves in inventing and colouring printed Fan-Mounts, and in mounting these fluttering implements of the ladies. They sell Fans brought from China, and some of them export considerable quantities of all kinds of Fans. They take about 10l. with an apprentice ; but there is but little employment for the journeywomen, who may earn, when they get a good shop, 12 or 15 s. a week.

Of the FAN-STICK-CARVER.

THIS is a business fit for lads who have more ingenuity than bodily strength. But there are few who practise it ; and there is not employment for many of them. They take about 10l. with an apprentice ; who, when out of his time, will require but little money to enable him to set up.

Of the FAN-STICK-MAKER.

THIS also is a business fit for weakly boys. The Fan-stick-makers are employed by those who keep the Fan Shops ; and make Fan Sticks of ivory,

ivory, tortoiseshell, wood, &c. They take about 5l. with an apprentice; but the many Fans brought ready mounted from the East-Indies, and sold here extremely cheap, have almost ruined this branch of business.

Of the FARRIER.

THE boy designed for this business ought not only to learn to read and write, but also to get some knowledge of anatomy, particularly that of a horse; and indeed the more knowledge he gets of medicine and surgery, the better prospect will he have of obtaining a good living by this business. He ought, particularly during his apprenticeship, to become thoroughly acquainted with the excellent works published, within these thirty years, by several ingenious and learned gentlemen on the diseases of horses. The Farrier is a compound of the Smith, the Doctor, and the Surgeon. He shoes horses, and attempts to cure all the diseases incident to that useful animal; in which he has a certain *Materia Medica* adapted to the constitution of the patient: But he is generally very illiterate, and more rough and cruel in his operations than is necessary. As this business requires strength, the boy ought not to be bound till he is about fifteen years of age. The sum given with an apprentice seldom exceeds 5l. and, when out of his time, he may earn

earn twelve or fifteen shillings a week ; or, if he can raise about 50l. he may set up master.

Of the FELLMONGER.

THIS is a very nasty, stinking trade, much exposed to wet and cold, therefore not fit for weakly lads. The Fellmongers buy up the skins of sheep and lambs, from which they discharge the wool, make the sheep skins into pelts, leather for breeches, alum leather, &c. They take from 5 to 20l. with apprentices ; who require only a common education. They give very poor wages to their journeymen ; and it requires four or five hundred pounds to set up master.

Of the FILE-CUTTER.

THIS is a very laborious business. The File-cutter forges the iron, forms the roughness of the File, by filing it, and makes rasps, by punching up the iron in sharp scales ; after which he case-hardens them. Those of this business take 5 or 10l. with an apprentice. A journeyman may earn 12 or 15s. a week ; and it will require about 100l. to set up master.

Of the FINE-DRAWER.

FINE-drawing is a method of sewing up the rents of woollen cloth, in so neat a manner, as to render the place that had been torn imperceptible.

This

This is a trade by itself, performed both by men and women; and requires exceeding good eyes. Those of this business take from 5 to 10l. with an apprentice; and the journeymen are able to earn half a crown or three shillings a day.

Of the FISH-HOOK-MAKER.

THOSE of this business make all the apparatus belonging to angling; as rods, lines, hooks, artificial flies, &c. They take from 5 to 10l. with an apprentice; who, after his time is expired, may earn 12 or 15s. a week; or, with about 50l. he may become master.

Of the FISHERMAN.

THE Fishermen for the most part take strong hardy lads without money as their apprentices. It is a laborious useful employment; and requires from 50 to 100l. to set up master.

Of the FISHMONGER.

THIS is a very profitable trade. The Fishmonger buys his Fish at Billingsgate; and the chief mystery of his business is to prevent Fish being brought to the market in such quantities, as to serve for food to the poor. A cruel and inhuman scheme!

The

The Fishmongers take from 10 to 30 l. with an apprentice; who will find it a cold sloppy business, and must rise very early to attend the market at Billingsgate. A journeyman, who serves in the shop, has usually 20 l. a year and his board; and 50 l. will enable a new beginner to set up shop. But a large dealer in fresh Fish, Stock-fish, Salt Fish, Caviare, &c. can employ from 100 l. to 1000 l.

Of the FLATTERS.

THIS business requires little more art than the bare management of the Flatting mill, which spreads silver plates flat, and flattens gold and silver wire, though finer than a hair, in order to their being twisted round silk for the making of gold and silver thread. This trade is sometimes joined to that of the gold and silver wire-drawers; though there are others who keep flatting mills for the flatting and spreading of pieces of plate, and follow no other business. They take about 10 l. with an apprentice, and give but small wages to their journeymen.

Of the FLAX-DRESSER.

THERE are but few of this business in and about London; and those make but a bare living by it: However the boys, who are to be put apprentices

prentices to it, do not require either much strength or ingenuity. The Flax-dresser prepares the Flax, after importation, for the use of the spinners, by combing it on heckles of different degrees of fineness, according to the nature of the Flax, and the uses for which it is designed. He takes 5 or 10l. with an apprentice; the wages of a journeyman are from 9 to 15s. a week, and 30 or 40l. will set up a master.

Of the FLETCHERS.

THIS company, which took its name from the French word *Fleche*, an arrow, formerly consisted of the makers of those offensive weapons; but since the invention of guns and pistols has caused the use of arrows to be laid aside, the company has consisted of persons of different trades, that have not the least relation to that of making arrows.

Of the FRINGE, FROG, and TASSEL-MAKER.

THE making of gold and silver Fringe, Frogs, and Tassels, is performed by some of the gold and silver Button-makers; but it is chiefly done by women upon the hand, who are able to make a handsome livelihood of it, when these ornamental parts of dress are in fashion. The making of silk Fringe is performed in the loom by the livery lace-weavers.

Of

Of the FRUITERERS.

THE Fruiterers keep shops in which they sell Fruit both of our own growth and that of foreign countries; as Pine-apples, foreign Grapes, Lemons, and Oranges. Some of them live handsomely; though they suffer greatly by their Fruit spoiling upon their hands. They take from 5 to 10*l.* with an apprentice; and 50*l.* will set up a master.

Of the FULLER.

THE business of the Fuller is to clean, scour, mill, and thicken woollen cloths; and is chiefly to be met with in the counties where the woollen manufacture flourishes: There are however several of this business about London. It is for the most part sloppy hard work; and therefore robust lads are only fit for it. The Fullers take from 5 to 10*l.* with an apprentice; and less than 100*l.* will set up a master.

Of the FURRIER.

THE Furriers cure, dye, and make up several kinds of Furs or Skins, with the hair on, into muffs, tippets, the lining of robes, &c. They die cat-skins, and those of rabbits, so as to imitate the richest and most valuable Furs, and make them up and sell them in various forms, at a much more
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reasonable price than they could be sold for, were they the Furs they so nearly resemble. They keep shops; and take from 10 to 20l. with an apprentice, who need be possessed of no very extraordinary abilities. It is a profitable trade, even when carried on with the strictest integrity. The journey-men, who dye the cat-skins, &c. and make up the articles they sell, are mostly foreigners, and can earn from 15 to 20s. a week and upwards. A person cannot set up in a handsome way without money or credit to the amount of 500l.

Of the GARDENER.

THE Gardener is a healthful, laborious, ingenious, and profitable business; but common Gardening alone requires no great learning to qualify a young man to become apprentice to it. There are a vast number of Gardeners round London, whose skill chiefly consists in their laying out their grounds to the best advantage, and in their bringing the best and most early produce of the Kitchen-Garden to market. The youth, who is apprentice to this most antient profession, may reap great improvement from studying the works of Bradley, Miller, and other authors on this subject; which will be of use to every species of Gardeners.

There is another class of Gardeners, called Nursery-men, who make it their chief business to produce

duce all forts of Fruit Trees, and particularly the best and most valuable foreign Fruits; as the Anana, or Pine-apple; they also produce Ever-greens, the most beautiful and ornamental Trees, Shrubs, and Flowers. These are also Designers, Draughtsmen, and Surveyors. They sell their productions to noblemen and gentlemen; by whom they are also employed in the profitable business of drawing Plans, laying out Ground, and directing Plantations. These ought to have a much more liberal education. They should early learn the useful arts of drawing, and the rules of perspective, and be particularly expert in drawing trees and landskips; they should also learn surveying land.

There are a few Gardeners chiefly employed in the production of Herbs, Plants, Flowers, Seeds, &c. for medicinal uses; and it will be of great advantage to the boy, who is to be put apprentice to one of these, to study Botany; which will not only perfect him in his business, but prevent his making mistakes that may prove fatal to his customers.

The Gardeners take 5 or 10l. with an apprentice, who ought to be a strong lusty lad, capable of bearing all weathers; but the journeymen, who work in the Kitchen Garden, have seldom more than 10s. a week: But one, regularly bred to the Nursery part, may have half a crown a day.

Of

Of the GATE and PALISADE-SMITH.

THE boy, who has a taste for this business, ought not only to have great strength of body, but a solid and masterly genius; which he should early improve, by learning to draw. While he is an apprentice, he must learn to adorn Gates with foliage and a kind of chased work, and to display a bold fancy in the disposition of the scrolls: Order, variety, and uniformity must appear in all the parts; and the whole have an air of grandeur suitable to the dignity of the owner. The balusters of stair-cases must be done in taste, and neither crowded with ornaments, nor too bare; they ought to appear of a piece with every thing about them; and should not be charged with any thing that would not discover a visible defect if taken away. Those of this ingenious branch of the Smith's business take about 10l. with an apprentice, who works from six to eight; and with 500l. may set up master, when his time is expired.

Of the GILDER.

THE Gilding of metals is a very profitable, and at the same time a dangerous business with respect to those who perform the work, occasioned by the quicksilver used in this art, which is apt to affect their nerves, and render their lives a burthen to them; whence the trade is but in few hands,
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and some of them women. Gilding is performed with the following amalgama of gold and quicksilver: The gold in thin plates is heated in a crucible, and when just ready to flow, three or four times the weight of quicksilver is poured upon it, and being immediately quenched in water, both together become a soft substance like butter. When the artist intends to gild, he rubs the piece to be gilt with aqua fortis, and then covers it with the amalgama. When it is all covered over and smooth, he holds it over a charcoal fire, by which means the mercury evaporates, and the gold remains upon the piece; the artist then rubs off all the roughnesses, and at the same time spreads the gold with an instrument called a scratch-brush; he then burnishes the work, and this gives it the colour wanted. The Gilders take from 5 to 10*l.* with an apprentice. A journeyman may earn from 15*s.* to a guinea a week; and a master may set up with about 60*l.*

Of the GINGERBREAD BAKER.

THIS, as well as the Baker, is a pretty laborious business, though it is not quite so fatiguing, nor is the apprentice obliged, in common, to work by night, or to carry such heavy loads by day. There are but few of this employment; and those make Ginger-bread of several kinds from great cakes to farthing and halfpenny toys. It requires

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no more than the common education, nor any genius. The masters take with an apprentice from 5 to 20*l.* which they seldom exceed. The wages given to journeymen are not much different from those given by a common Baker; and a master may set up with 60 or 70*l.*

Of the GIRDLER.

THE Girdlers of London are very few in number; and have little to do in their own business during a peace: But, on the breaking out of a war, the masters are pretty sure of making their fortunes, by the vast number of hands they are obliged to employ, occasioned by the great demand for Belts and other Accoutrements for the use of the army. The lads put apprentice to this business require neither much strength, genius, or learning; the masters take about 10*l.* with them.

Of the GIRTHROP or GIRTH WEAVERS.

THIS business requires neither any extraordinary abilities nor learning. The Girthrop Weavers make the stuff of which Girths are made by the Sadler, who cuts them into lengths, and sews on the leather straps and buckles. There are few of them in London; and these take about 5*l.* with an apprentice, who ought to be pretty strong; and may set up with 20 or 30*l.* But this business is neither very profitable to the master nor the journeyman;

neyman ; which last may earn from 10 to 14s. a week.

Of the GLASS-HOUSE.

THE boy, designed to be put apprentice to the master of a Glass-house, ought to have a strong constitution, and be capable of bearing great heats long together without the danger of fainting ; and should be naturally hardy : But no school education is necessary, besides reading, writing, and accompts. Common Glass is made of sand and the salt of vegetables ; and Flint Glass of flints, kelp, sea salt, or the ashes of vegetables. In both these kinds of Glass, the materials are vitrified by the constant and intense heat of the furnace, in which they are placed in large strong earthen vessels at every mouth of the furnace. When the Glass is sufficiently melted and fit for use, the workman puts into one of these mouths a long hollow iron rod or tube, and dipping it into the vessel, brings out a lump of melted glass ; and turning the rod round to prevent its dropping off, blows through the rod, and rolling the Glass on a stone forms the neck of a bottle. He then places the rod on a hook at the mouth of the furnace, and still turning it round, blows out the belly of the bottle, which he finishes by gently rolling on the stone ; and taking a piece of iron forms the cavity at the bottom of the bottle, by pressing in the soft yielding metal. This

being done, and the bottle growing hard, he touches the neck of the bottle next the hollow rod with a cold iron; on which it breaks off, and lies upon the stone. The artist then heats the end of the rod and the little Glass that still adheres to it, and fixing it in the hollow he had made at the bottom, carries the bottle again to the mouth of the oven, and finishes the neck; when taking off the bottle as before, it is placed in a kind of oven over the furnace to harden.

In much the same manner every thing which passes through their hands is finished by blowing, and moulding the soft Glass into the form desired; the whole process being performed with amazing expedition. The common Window Glass, the making of which is a trade by itself, is also performed by blowing bladders of Glass of a prodigious size, cutting each into two hemispheres, and suffering them to settle flat on the plane whereon they are laid.

The Plate Glass-maker however works in a different manner, and is likewise a distinct trade: For the plates of Glass used for coach windows, and looking-glasses, are cast much in same manner as the Plumber casts sheets of lead; and these, coming rough from the hands of the maker, are obliged
to

to be ground smooth and polished, in order to render them perfectly transparent.

It is observable, that as the fires of Glass-houses must be constantly kept burning for many months together, every Glass-house has two sets of men, and that while the one rests, the other is constantly at work. Glass-houses are for the most part very advantageous to the proprietors, but require great sums to enable them to carry them on. We are however not informed of the sums given with apprentices: they are probably small on account of the fatigue the boy must undergo; and the journeymen in the several branches have very large pay.

Of the GLASS-GRINDER.

THE boy designed to be of this trade ought to be strong, and capable of enduring cold and wet; little else being required to fit him for this business. The Glass-grinder has the Plate Glass sent to him rough; and it is his business to grind and polish it. For this purpose, he fixes the Plate Glass horizontally in a heavy wooden frame, and rubs it backwards and forwards upon a plane, on which sand and water are constantly running. The Glass, being thus on both sides ground perfectly true, is afterwards polished with emery and putty. Those of this business take 5 or 6l. with an ap-

prentice; who, when his time is expired, may earn about 15 s. a week, or with about 60 l. may set up master.

Of the GLASS and PICTURE FRAME CARVER. ✓

THIS business, which has been lately carried to great perfection, requires much ingenuity, a lively and elegant fancy, skill in drawing, with great neatness, foliages, fruit, flowers, birds, heads, &c. a good eye, and a steady hand. The Frame being prepared as in the following article, is sent to the Carver, who finishes it in two different manners, as the work requires; either carving in the wood entirely, and afterwards causing the work to be gilt, or cutting out the figures first roughly in the wood; after which the whole is covered with several coats of whiting to a considerable thickness; which, when dry, the Carver wets with a brush, and finishes the figures, by making such strokes and imbellishments on the whiting as is agreeable to his pattern. After this he either sends the Frame home, white as it is, or causes some parts of it or the whole to be gilt. But neither the Frames finished in the wood, nor those in the whiting, are entirely cut out of the solid; for all the figures that rise above the plain of the Frame are glued on before the Carver begins to work. Those of this business take about 10 l. with an apprentice; who, when out of his time, if he is a good hand, may
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earn upwards of a guinea a week ; or, with about 20l. may set up for himself.

Of the GLASS and PICTURE FRAME-MAKER.

A Boy designed for this business requires only a common genius, and no extraordinary education. The Glass and Picture Frame-makers are a set of Joiners, who make these Frames for the Carvers, which require but little ingenuity, as they only join pieces of deal roughly plained, in the shape and dimensions required : Only if the Frame is to have any large holes in it, they cut them out in their proper places ; or, if it is to have mouldings raised on the wood, these they put on ; but the Carver plants on the rest of the figures. They take from 5 to 10l. with an apprentice ; who, when out of his time, may set up with so small a sum as ten or twenty pounds. The Frame-maker for Prints is a different trade.

Of the GLASS-SELLER.

THESE are a set of shop-keepers, who deal very largely in all kinds of vessels made of white flint Glass ; as Decanters, Mugs, Drinking-glasses, Salts, &c. either plain or figured, by being pressed in a mould when making or cut. They also generally sell figures to adorn chimney-pieces, &c. made of Bow and Chelsea china. They take about 20l. with an apprentice ; who, when out of

his time, will require 3 or 400l. to enable him to set up in a middling way for himself.

Of the GLAZIER.

THE business of Glazing Windows formerly demanded much more ingenuity than at present, from the various forms into which the small panes of Glass were disposed. This business requires such a steady brain, that the youth, who is put apprentice to it, ought to be capable of standing without giddiness on the brink of a precipice. He cuts the Glass with a pencil pointed with a small diamond, and fixes in the panes of sash windows with putty, made of linseed oil and whiting. The small panes are fixed in slips of lead, wherein a groove is made. They buy their Glass in chests; and their profits arise from the difference between the buying and selling price. Those of this business are subject to the palsy, either from the fumes of their solder, or their often handling their putty, in which white lead is frequently mixed. They take with an apprentice from 10 to 20l. Their journeymen have 12 or 15s. a week; and a master may set up with 100l.

Of the GLOVER.

THIS is a very good shop-keeping business. Those, who have a great trade, deal for many hundreds, if not thousands, a year. The leather
of

— of Gloves is not tanned, but cured with allum, which renders it soft and pliable, and therefore more proper for gloves, &c. The master cuts out the work and gives it out to the makers, who are generally women; and, if quick hands, can get nine or ten shillings a week; but most part of the Gloves, worn in London, are made in the country, where labour is cheaper than it is in the city. Sometimes the Glover is also a Breeches-maker; but this grows less and less common. The leather, used for what are called Kid Gloves, is imported from Ireland, and the duty on them makes them dear. The Glovers take with an apprentice from 10 to 30*l*. A journeyman to a shop may get 20 or 30*l*. a year and his board, or use, in setting up for himself, from 100 to 1000*l*.

Of the GOLD-BEATER.

THIS business requires more strength than ingenuity; and very little learning is necessary to qualify a youth for it. The chief secret of the art consists in purifying the Gold, and heating it when in thin plates, before he begins to hammer it; which is done with a heavy hammer, between leaves made of gut, called Gold-beater's leaf, till this most heavy metal is become so thin as to be ready to fly away at the least breath of air. They also make Leaf-silver in the same manner. They take about 10*l*. with an apprentice; who, when

out of his time, may earn 15s. a week. It will require at least 50l. to set up master.

Of the GOLD SMITH.

IS one who keeps shop, and deals in all sorts of Gold and Silver Plate. The youth, designed for this business, ought to have a good capital to set up for himself when out of his time; and if besides writing a good hand, and being ready at accompts, he learns to draw, it will be of no small service to him, in improving old patterns, and giving draughts to the various branches of Silver Smiths, who when he is become a master will work under him. The Gold Smiths take from 50 to 2 or 300 guineas with an apprentice; allow a shopman 20 or 30l. a year and his board, and tho' some set up, with 500l. others begin the world with 3000l.

Of the GOLD and SILVER WIRE-DRAWER.

THE boy designed for this business has no occasion for any uncommon abilities; the whole of his work being to be performed by means of an engine; nor does he require any extraordinary education, the principal qualification is a clean dry hand, to prevent tarnishing his work: the business is thus performed. If Gold Wire is to be drawn, a round ingot of silver of about the thickness of a finger is double gilt, and afterwards drawn into wire by the help of a mill. This mill consists of
a wheel

a wheel which turns the spindles, and a steel plate perforated with holes of various dimensions. The ingot is at first passed through the largest hole, and then drawn through one a degree smaller, and so continued till it is drawn sometimes much finer than a hair; and yet every part of the wire continues gilt. Silver Wire is drawn in the same manner, only the ingot is not gilt. The wire is then sent to the silver flatter, and afterwards being twisted round silk by the silver thread spinners, forms gold or silver thread. The Wire-drawer also makes Purl, which is silver or gold wire twisted upon a needle in a wheel: when the needle is full, it is pulled out, and the wire remains twisted in rounds, like the windings of a very small worm. This is used by Embroiderers, and gold and silver Button-makers. The Wire drawers are employed by the Lace-men, who furnish them with the plate, and pay so much an ounce for their labour. They take from 5 to 10l. with an apprentice: a journeyman may earn 3s. a day, and 100l. will set up a master.

Of the GROCER.

THIS business requires no other education than any other buying and selling trade; the boy ought to be brisk and active, write a good hand, and understand common arithmetic: he ought also to have a sum sufficient to enable him, when out

of his time, to set up for himself; because there are very few journeymen in this business. This tradesman deals in tea, sugar, coffee, chocolate, raisins, currants, prunes, figs, &c. He buys the goods from the importer, and his profits arise from his buying and selling prices. The Grocer takes from 20 to 100l. with an apprentice; the few journeymen in the trade have 15 or 20l. a year, and their board, and a young man ought to have at least 500l. to enable him to set up master.

Of the GUN ENGRAVER.

THE boy intended for this business ought to learn to draw, though his knowledge of that art may be much less extensive than in the Copper-plate Engraver. Those of this business are employed by the Gun-smiths to engrave the locks, and part of the barrels of guns and pistols. They take from 10 to 20l. with an apprentice, and a journeyman may earn 20s. a week.

Of the GUN-INLAYER.

THIS, as well as the former, is a pretty ingenious business, and the youth who would excel in it should likewise learn to draw. The Gun-Inlayer ornaments the stocks of guns, blunderbusses, pistols, &c. with inlaid work of silver, mother of pearl, &c. The masters take 10 or 20l. with an apprentice, who when out of his time, may get about 3s. a day.

Of the GUN-SMITH.

THIS is an ingenious business, and therefore a dull stupid boy ought not to be put apprentice to it. The Gun-smith has his gun and pistol barrels founded for him; bespeaks his stocks of the gun-stock-maker; makes locks for them, and mounts them. The company of Gun-smiths of London, consist of very few members; but they have most of them the honest pride of suffering none but the best work to go out of their hands: they are therefore very cautious in the choice of their barrels; shew great skill in the tempering their springs; in forming their joints to make their work sit close, and in giving beauty to their work by filing and polishing. This care occasions the Guns made in the City to become dearer than those made out of the liberties. They take from 10 to 20l. with an apprentice, and pay 15 or 20s. a week to their journeymen.

Of the GUN-STOCK-MAKER.

THOSE of this business make stocks for all the several kinds of guns, blunderbusses, and pistols. They take from 5 to 15l. with an apprentice, who, when out of his time, will be able to earn 15s. a week.

Of the HABERDASHER of HATS.

THIS trade requires no more ingenuity nor learning than any other retail trade. The boy during his apprenticeship, ought however, not only

only to learn to distinguish the various species of Hats, from the finest beaver, to the coarsest felt, and to know the buying and selling prices of each ; but to learn so much of the manufacture of Hats, as to know when they are well or ill made, of what materials they are composed, and whether the workmanship be answerable to the price. As to the rest of his business, brushing, curing, lining, lacing, and looping, these are so easily learnt, that it would not be worth while to spend seven years in acquiring them. Those of this business take with an apprentice, from 20 to 50*l.* there are but few journeymen shopmen, and they have 15 or 20*l.* a year, and it will take 1 or 200*l.* to set up master, with only an indifferent stock.

Of the HABERDASHER of SMALL-WARES.

THE boy designed for this trade ought to have a genteel person, joined to a great sprightliness, activity and complaisance ; he should write a good running hand, be well versed in accounts, and have an extensive and ready memory ; for those of this business deal in an immense number of little articles, as pins, needles, threads, tapes, ribbons, &c. They take from 50 to 2 or 300*l.* with an apprentice, and allow a journeyman 20 or 30*l.* a year besides his board ; but it will require 500 or 1000*l.* to set up shop in a genteel way.

Of

Of the HAIR-CUTTER.

THIS business requires almost no education; but a complaisant and insinuating behaviour is absolutely necessary. Some Hair-cutters keep shop, while others only wait on gentlemen and ladies at their houses. Some of these last have only six pence or a shilling for cutting and curling a person's hair, while others have a crown, and others again half a guinea. But to the dishonour of our nation, these extravagant prices are hardly ever given to any but Frenchmen. The Hair-Cutters who keep shop, and have from 1s. to half a crown for cutting hair, take about 10l. with an apprentice, and give their journeymen nearly the same wages as the barbers, who also sometimes follow this business.

Of the HAIR-MERCHANT.

THOSE of this trade import Human Hair, Goats-hair, Horse-hair, &c. from abroad, and buy Hair of those who travel over England and Scotland to procure it. He sorts it into parcels, according to its colour and goodness; employs hair-pickers, to pick the black from the white, and dead from the live Hair; and hands to mix it into proper shades or colours. He also dyes those that are of an improper colour, and bleaches such as are not quite white: he curls it by rolling it upon pipes, and baking it in the oven. There are Hair-Merchants who only deal wholesale, and sell it as they buy it; but

but most of them prepare their Hair in the manner here mentioned, and sell it either curled or uncurled to the barbers. They take with an apprentice from 10 to 20*l*. Some Hair-Merchants set up with no more than 100*l*. while others employ in trade upwards of 2000*l*.

Of the HARDWARE-MAN.

THE tradesmen thus named are dealers in Sheffield and Birmingham Hardwares, at which places many thousand artists are employed in different branches, as in making knives, razors, scissars, toys, &c. in iron, steel, brass, &c. Some of these keep shop, and deal in the retail way; while others who mostly keep warehouses, export vast quantities of cutlery wares to Sweden and Germany, and both cutlery ware and instruments of husbandry and agriculture to all our plantations. It is not easy to conceive the numerous articles that pass through the hands of these wholesale dealers; and therefore a boy desirous of serving an apprenticeship to this business, should be of a lively active disposition, and have a good memory; he ought to write a swift running hand, and to understand arithmetic and book-keeping.

The retail shop-keepers take from 20 to 40*l*. with an apprentice, and the wholesale dealers have from 40 to 200*l*. the latter give from 20 to 40*l*. a year to a journeyman brought up to the business.

business in London. In the retail way, a person may set up master with about 200*l*. but in the wholesale way it will require from 2000*l*. to more than five times that sum. Some of this trade in London deal for above 50,000*l*. a year.

Of the HARTS-HORN-RASPER.

THESE rasp Harts-Horns, Sassafrass, Logwood, &c. into very thin shavings, which they sell to the Druggists and Apothecaries. They also make and sell Harts-Horn Drops; some of them keep shop, it is a good business, requires little education, but is hard and laborious. They take from 10 to 20*l*. with an apprentice, give but low wages to journeymen, and the business may be set up with 100*l*.

Of the HATBAND-MAKER.

THE Hatband-maker, who is also called Lining-cutter, sells all the materials for the Hatters, from the wool or fur of which hats are made, to the twist that goes round the crown and loops them. There are but few in this way; but their dealings are very large. Their apprentices and journeymen are pretty much on a footing with those of the wholesale Linen-draper or Haberdasher; and it requires as large a fortune to set them up.

Of

Of the HATTER or HAT-MAKER.

THE Hatters, or Hat-makers, are those who work the wool, hair, or fur, into a proper substance for a hat: This is called felt. It is very slavish work; the men being continually stooping over the steam of a hot kettle; and requires strong lads, who are taken apprentice with 10 or 15 l. and frequently with nothing: But when out of their time, they may get, as journeymen, 15 or 18 s. a week, or set up in this branch with 100 l.

Of the HATTER or HAT-FINISHER.

THIS business requires no great strength; and is not near so fatiguing as the above. The Finisher dyes, trims, stiffens, and irons the Hats; and from him they go to the Haberdasher, who is also called a Hatter. (See *Haberdasher of Hats.*) The Finisher takes apprentices on much the same terms as the Hat-maker; who, when out of their time, will be able to get as much by being journeymen; and may likewise set up with 100 l.

Of the HAT-SHOP.

THESE shops have greatly multiplied of late years, since the universal use of womens hats. They at first only dealt in those imported from Leghorn, and straw and chip made at Dunstable: but

but now they deal largely in all kinds of Hats worn by women and girls, beavers excepted, which are still sold by the Mens Hatter, or Haberdasher of Hats. It is at present a very pretty business, and employs many hands : But as it depends entirely on that mutable thing Fashion, it may soon be of little value. They take few apprentices ; for any handy young woman may learn it in half a year's application ; and these they can turn away when business is slack, which it is generally two or three of the winter months. A young woman, who has served her time to a Milliner, Child's-coat shop, Haberdasher, or to any trade, where she has been used to her needle, may supply the place of a journey-woman to one of these shops ; and I believe the wages given is pretty much the same with the above trades. There are some who get a tolerable maintenance, by taking the hats home to make. The Shops give but a very low price for the work ; but by constant use they finish them with surprising rapidity, making several dozen a week.

Of the HOLSTER CASE-MAKER.

THE boy designed for this business need have no extraordinary genius, and only a moderate degree of strength. The work has some resemblance to that of a Shoe-maker ; and is very profitable. The masters take from 5 to 10l. with an ap-

apprentice; who, when out of his time, may earn 15 or 18s. a week; or, if he has about 100l. may set up for himself.

Of the HOOP-PETTICOAT-MAKER.

THIS trade is at present almost out of use; hoops being now only worn in full dress. While it remains so, I imagine none will put their girls apprentice to it.

Of the HORNER.

THIS is an ingenious, though a stinking business; and the lad, who is put apprentice to it, requires more ingenuity than strength. The horns of oxen being when hot, soft, and ductile, the Horner presses them into variety of forms, and makes Tumbler, Spoons, Snuff boxes, Ink-horns, &c. and in some works he uses the lathe, and turns the Horn when cold. Those of this business take about 5l. with an apprentice; who, when out of his time, may earn 12 or 14s. a week; or, with about 50l. may set up master.

Of the HORN-BUTTON-MAKER.

THOSE who practise this art make Horn Buttons, which can hardly be distinguished at a distance from those of mohair and horse-hair, by pressing them while hot in moulds, and afterwards dying them. They also make Horn Button moulds of

of all sizes. They require about 5 l. with an apprentice ; who, when out of his time, may earn about 12 s. a week.

Of the HORN-PRESSER.

THIS is an art which requires more strength than ingenuity. The horns of oxen are cut into several rings about an inch or an inch and a half broad, and being held over the fire, these rings when softened by the heat, are cut and pulled open with a pair of pincers. They are then placed between hot iron plates, and pressed with great force till they are spread, and become as thin as the workman would have them: this operation is repeated, in order to make Horns for lanterns, horn-books, &c. by heating fresh irons, and again putting them in the press till they become transparent, and almost as thin as a sheet of paper. They take about 5 l. with an apprentice ; who, when out of his time, may earn 10 or 12 s. a week.

Of the HORSE-MILLINER.

THOSE of this business deal in every thing relating to the furniture of horses that is not generally sold by the Sadler ; as Horse-cloths, Saddle-cloths, Hair-cloths, Nets, Housings, &c. There are but few of this trade ; but those are mostly in a large way, and serve not only gentlemen but the Sadlers. This business requires no other education

tion than is necessary for every shop-keeper. They take from 20 to 100l. with an apprentice; and give 20l. and upwards a year to a journeyman; and have seldom less than 1000l. stock.

Of the HOSIER.

THIS, like all other trades that merely consist of buying and selling, requires no other learning, but writing a good running hand and accounts; and the whole mystery to be learnt, during the apprenticeship, is to know the buying and selling prices, and to obtain some judgment of the properties and degrees of the real value of the things in which they deal. The Hosiers sell silk, worsted, and cotton stockings, night-caps and gloves, linsey and bays, and also silk and worsted pieces for waistcoats and breeches; which some export, and others sell only retail. They take from 50l. to 100l. with an apprentice; give 20 or 30l. a year and their board to their journeymen; and cannot well set up under 500l. Those, who deal in the wholesale way, frequently employ above 5000l. in trade.

Of the HOT-PRESSER.

THE boy, who is desirous of being a Hot-presser, ought to have a strong and healthy constitution, capable of bearing heat; but neither learning nor genius are necessary. The business

ness is to render smooth, glossy, and in even folds, most sorts of woollen goods for sale, by means of Hot-presses, made of steel plates and screws. The master takes from 10 to 20l. with an apprentice; who, when out of his time, may earn 12 or 15 s. a week; or, if he has 100l. he may set up for himself.

Of the HOUR-GLASS MAKER.

THIS is a branch which requires very slender abilities to become master of; he is partly a turner, and buys his glass from the glass-house. There are not many of them; tho' there are more Hour-Glasses made than is generally imagined, especially for the sea, there not being a ship without several kinds of them, as hour, half-hour, quarter of an hour, and minute Glasses. The masters will take an apprentice with 5l. who when out of his time, may earn 10 or 12s. a week, or with 20l. may set him up for himself.

Of the HOUSE-CARVER.

A Boy, desirous of being of this trade, ought to have a natural genius for the art, and to be early taught drawing, to which he should apply at his leisure hours as long as his apprenticeship lasts. His education may, in other respects, be only English, writing, and arithmetic. Those of this business take with an apprentice from 10 to 20l. and it will require from 100 to 500l. to set up master.

Of

Of the HOUSE-PAINTER.

A Mere House-painter requires very small abilities; but as they in general paint signs and inscriptions in large letters and various hands, a particular kind of education is absolutely necessary. The boy who is to be put an apprentice to this business, ought therefore to spend some years in learning to write with great perfection, and particularly the print hand Roman and Italick, which are easily acquired; he ought then to learn, not only arithmetic, but so much of geometry as is necessary to his measuring the surface of all bodies by the square yard: And at the same time he should learn drawing, for which he should have some degree of genius to prevent his producing such monstrous figures on signs, as are a disgrace to the art of painting, and which might be finished by a good hand in a better taste, even at the expence of less time and labour, than is employed by the blockhead. After such an education he will have little more to learn besides improving himself in these arts, and in the secret of grinding, mixing, and compounding the colours. The masters take about 10l. with an apprentice, who ought to consider before he is bound, whether he shall have 30 or 40l. to enable him to set up master when he is out of his time; for the trade is over stocked with journeymen.

Of the JACK-SMITH.

THIS business requires an ingenious handy lad; but little education is necessary; for the mechanic principles of a Jack are so few, and so commonly known to the trade, that they perform their work practically, without any regard to the laws of mechanics; yet, if the boy has any taste for that science, he will reap no small advantage from learning it. The most common sorts of Jacks for roasting meat are those moved by weight, consisting of a double set of wheels, a barrel, round which the rope fastened to the pullies is wound, a perpetual screw, and a fly. Some of them have a multiplying wheel, or a wheel of a larger diameter, upon which, the rope first goes, and then round the barrel of the Jack: As the barrel is four or five times less than the wheel, the Jack is proportionably longer in going down, since every five turns of the barrel takes off but one turn of the multiplying wheel. The Smoke-jack is moved by a fan made of tin, placed horizontally in the chimney. This moves a wheel, round which the chain is placed by a pinion; and this fan being carried about by the smoke of the fire, the Jack goes constantly, and having no weight is never wound up. The making of Jacks is a very profitable trade. The masters frequently keep shop, and take about 10*l.* with an apprentice; who, when a journey-

man, may earn 15 or 18s. a week; or, if he has 50l. may set up master.

Of the JAPANNER.

Japanning is a very curious art; and those ingenious boys are only fit for it, who have a natural taste for drawing and painting: The youth, therefore, who is put apprentice to this business, ought to learn to draw to great perfection. The Japanner embellishes with painting and japanning all sorts of fine cabinets, chests of drawers, corner-cupboards, &c. all made of wood; besides tea-boards, waiters, and other utensils, made of copper, &c. The japanning part is done over the painting, by washing the piece all over with a fine varnish, and drying it before a good fire. The masters take 20 or 30l. with an apprentice; who, if a good hand at painting, will be able to get between 20 and 30s. a week, and perhaps more; and, with 50 or 60l. he may be enabled to set up master.

Of the JEWELLER.

THERE are none of these who keep shop, except those who are also Goldsmiths, Toy-men, &c. some of whom sell rough diamonds, and other valuable stones, and also those that are set. A person, who undertakes this business, ought to have a good eye, that he may observe the flaws and de-
ceits

ceits in jewels, and a nice taste in those valuable trifles; he must be a perfect judge of all manner of precious stones, and pastes made in imitation of them; know their value according to their different size and water, and the manner of having them cut to the best advantage. These particulars may be learnt from carefully studying Mr. Jeffreys's excellent Treatise on Jewels. Those of this business send rough diamonds to be cut and polished by the Diamond-cutter, and all other stones for the same purpose to the Lapidary; after which, they cause them to be set by the working Jewellers. The principal part of the education of a Jeweller is his being well versed in accounts. They take no apprentices as Jewellers; but ought to have several thousand pounds to enable them to deal in these valuable articles of trade.

Of the WORKING-JEWELLER.

HIS business is very extensive and divided into several branches; some masters applying only to one, and others to some other branch: But these are not so distinct, but that an ingenious man, who is a perfect master of some of the most difficult branches, may perform all, especially if he has learnt to draw; for this part of education is necessary to a Jeweller, in order to draw draughts of new patterns, and to form beautiful models of them in silver, to enable the Silver-Caster to take the im-

pression and cast them. See the article *Silver Caster*.

The Jewellers, it is said, formerly made all their various work from the solid gold and silver, which they bought from the Refiner; and having cast it into ingots, they beat it to the proper size, and filed out the design, till the ingenious Mr. Hammar invented the art of making patterns; which have been since greatly improved by other artists. From these patterns the Silver Caster takes the impresson, and bringing home the work, it is repaired and polished by the Jeweller; and, in some works, several pieces are soldered together. He in short sets the stones, and completes every part of the work. The working Jeweller takes from 12 to 40l. with an apprentice; those, who set diamonds, and perform the most curious works, taking more money than those who set only cornelians, Bristol stones, crystals, &c. The journeymen earn from 12s. to 2l. a week, according to the quickness or goodness of the hands, and the works they are capable of performing; and it will require from 20 to 100 l. to set up master.

Of the INK-MAKER.

THOSE, who are solely employed in making black and red writing Ink and Ink powder, are but few in number, because most of the retail Stationers make Ink to supply their own customers.

The

The Ink-makers take no apprentices, since whatever secrets they may be possessed of, it is for their interest to keep them concealed.

Of the INSURANCE-BROKER.

SEVERAL of this business keep shops near the Royal-Exchange, in order to insure ships and their cargoes, from being lost, in sailing from one port to another, by storms, or taken either by pirates or a foreign enemy. These Brokers agree with the master of a ship, or the merchant, to insure so many hundred or thousand pounds on the ship and cargo at so much per cent. draw up the policy, and get one or more moneyed men to agree to the bargain, and sign the policy, or instrument that contains the obligation. Those, who thus sign their names to it, are in the merchant's style called Under-writers.

Of the JOINER.

THE boy, designed for the trade of a Joiner, ought before he goes apprentice to be well acquainted with geometry and mensuration, and to have some ingenuity and strength of body. Joiners work requires a nicer hand, and greater taste in ornaments than the Carpenters; it also requires labour in the execution. The Joiner makes Doors, Sash-window Frames, and Window Shutters, wainscots

rooms, and is paid by so much a yard square. They take from 10 to 20l. with an apprentice; who, when out of his time, may earn half a crown a day. A master may set up with 100l. but if he is employed in large undertakings, he may soon want five times that sum. Many of this business are also Carpenters.

Of the IRON-HOOP MAKER.

THIS is a class of Smiths solely employed in making Iron Hoops for large vessels belonging to the Brewers and Distillers. It is a laborious business; and requires no extraordinary abilities. They take from 5 to 10l. with an apprentice; who, if he has 50 or 60l. may, when out of his time, set up master.

Of the IRON FOUNDER.

THIS work requires both strength and ingenuity. They are employed in casting backs for stove-grates, flat smoothing irons, &c. They take about 10l. with an apprentice; and require about 100l. to set up master.

Of the IRONMONGER.

THIS trade requires no other education but that necessary for all tradesmen in general. Some of them deal only in iron and steel unwrought;

wrought; but most of them sell iron and brass wrought up into almost innumerable materials, tools, and necessary implements; and some deal in both. They expect with an apprentice from 30 to 100l. and upwards; to a head shop-man they give from 20 to 50l. a year and his board; and not less than 500l. will set up one in a common way: but those, who keep forges or founderies, or deal in exportation, employ many thousands.

Of the IVORY TURNER.

THE boy, designed to follow this business, ought to be naturally ingenious and handy; and, as it requires but little strength, it is fit for such as are of a slight make. The Ivory Turners make a variety of things; as Handles of Instruments, oval Boxes, Balls, &c. of Ivory, Brazil, Lignum Vitæ, &c. and some of them keep shop. They take from 5 to 10l. with an apprentice; who, when a journeyman, may earn from 14 to 18s. a week; and about 30l. will be sufficient to set up a master, who works for the shops; but, if he sets up a shop himself, he ought to have 100l.

Of the LAPIDARY.

THIS business is not very laborious; and is therefore fit for a boy who has no great share of strength; and no extraordinary education is necessary. The Lapidary differs from the Diamond-

cutter only in his cutting none but stones of less value than the Diamond; He works with an engine constructed on the same principles with the Diamond-cutter; the beauty of his work also consists in his giving it its full lustre, and causing it to make the greatest shew; and like the last mentioned artist he mostly uses the powder of diamonds for cutting or sawing his stones, and polishes with emery and putty. The Lapidary takes with an apprentice from 10 to 20*l*. A journeyman may earn from 15 to 20*s*. a week; and it requires about 50*l*. to set up master.

Of the LAST and HEEL-MAKER.

THIS business requires strength; but neither much ingenuity nor learning. Those of this trade make Lasts and wooden Heels for the Shoemakers, generally of birch, or some other soft wood. It is a laborious employment, though they are assisted with a kind of engine, which is a large knife fixed to a block by one end, in such a manner, as it can be moved up and down; and to the other end is fixed the handle. When they work, they hold the piece of wood upon the block, and, by raising the handle, apply the edge where they design to cut; then forcing it down with the hand, it is done with tolerable ease. It is but an indifferent business; in which from 5 to 10*l*. is given with an apprentice; and 50*l*. will set up a master.

Of

Of the LEATHER-CUTTER.

THIS business requires strength, and no other ingenuity than is necessary to cut out a skin of Leather to the best advantage. It took its rise from the great number of poor Shoe-makers and Cobblers, who are not able to buy Leather at the first hand. The Leather-cutters cut out their Leather in Soles and upper Leathers for sale; and require a general knowledge in the properties of Leather. They take from 10 to 30 l. with an apprentice; give about 20 l. a year and their board to their journeymen; and require upwards of 500 l. to set up master; but some employ 2000 l. in trade.

Of the LEATHER-SELLER.

THOSE designed for this business require, like the former, no extraordinary abilities, except a sufficient sum of money, to set up master when they are out of their time, and a common education. The Leather-seller is a shop-keeper, who deals in almost all kinds of Leather. He generally expects 30 or 40 l. with an apprentice; who, when out of his time, may have from 20 to 30 l. by being a journeyman shop-keeper or book-keeper; but to stock a shop well, will take up 3 or 400 l. and some have four times that sum in trade.

Of the LETTER-FOUNDER.

THIS is a class of Founders who are solely employed in casting Letters or Types for the Printers. It is an ingenious business, of which there are only three in London. These Letters are cast at the end of pieces of metal about an inch long. Those of every class and every size are formed in the following manner: The Master Funder cuts the Letter in relief on the point of a steel punch, with the nicest exactness; and then striking the impression upon a piece of copper, the Letter is left indented in it; and this piece of copper, with this impression, which is called the matrix, is placed in an iron mould, which being shut, the metal is poured in, and the Letter cast. The work is not hard; but attended with some inconvenience as to health, on account of their standing all day over the hot metal, which is a mixture of lead, pewter, antimony, &c. They take with an apprentice 10, 15, or 20l. and a journeyman may earn 3s. a day; but it is not a very easy task to commence master.

Of the LANDSKIP-PAINTER.

THERE are a few Painters in London who solely apply themselves to Landskip-painting; and take apprentices to that business. The youth, who hopes to make a distinguished figure in this art, by being put apprentice to one of these masters,

ters, ought to have a genius for Painting; which he should cultivate by learning early to draw, and by obtaining a perfect knowledge of the rules of Perspective. He should become a careful observer of Nature, to prevent his mingling, in one piece, the fruits and flowers of different seasons; and, while he is apprentice, he should sometimes copy for his own use the beauties of an uncommonly fine sky; and for that purpose should view the gilded clouds that adorn the rising and the setting sun. He should endeavour to give fainter colourings to distant objects; and, by observing the different strength of light and shades at different times of the day and of the year, endeavour to improve as much from Nature, as from the Pictures, and the lessons of his master. Those of this business take from twenty to an hundred guineas with an apprentice; who, when out of his time, may, if he has an extensive acquaintance among persons of distinguished taste and fortune, easily set up for himself.

Of the LAND-SURVEYOR.

THE youth designed for this business ought to have a liberal education; he should obtain a thorough knowledge of geometry, and particularly of surveying: He should also understand drawing and perspective; and it might be well worth his while to visit France and Italy. The Land-surveyor is employed in measuring land, and in laying

it out in gardens, fields and plantations about gentlemen's seats. They may earn a guinea a day, while employed. They take no apprentices; and require very little to set up, besides an extensive acquaintance among the great; but this is very often extremely difficult to obtain.

Of the LACE-MAN.

A Youth designed for this trade ought to have a polite education, some knowledge of drawing, and a genteel person and behaviour, added to a very handsome fortune, to enable him to set up for himself. The Lace-men, who by their fortunes are in the first class of tradesmen, keep very handsome shops, in which they sell all sorts of gold and silver Lace, gold and silver buttons, shapes for waistcoats, fringes, spangles, gold and silver thread, purl, flesy, twist, &c. They employ the gold and silver Wire-drawers and Orrice-weavers; take from one to three hundred pounds with an apprentice; pay their journeymen from 20 to 60*l.* a year with their board; and require from 1000 to 10000*l.* to set up.

Of the LACE-SHOP, or CHAMBER.

BY those who keep these shops, or chambers, are understood such as import Brussels and Mechlin Lace, and also those who sell Bone Lace,
made

made in Buckinghamshire, &c. They take no apprentices. It will require near 1000*l.* to enable a person to set up for himself; and those, who deal in foreign Lace, may employ 10,000*l.* to great advantage: Though of late years this trade has been declining, from the fashion of the ladies wearing gauzes, which are trimmed with slight open Laces of the manufacture of our own country.

Of the LETTER-CASE-MAKER.

THE boy, who is designed for this business, ought to have some ingenuity; but no more than a common education is necessary. Some of this trade make a great variety of sorts, fastened with locks and clasps of various kinds, together with travelling desks, &c. This art has been lately much improved by Mess. Richards and company; who have not only invented more commodious Pocket-books, &c. but make silver and gold clasps, finely chased, others beautifully enamelled, and others of polished steel and gold. The Letter-case makers in the common way take from 5 to 10*l.* with an apprentice. A journeyman gets from 12 to 15*s.* a week; and may set up with 50*l.*

Of the LIGHTER-BUILDER.

THE boy, designed to be put apprentice to a Lighter-builder, ought to have many of the qualifications of the Ship-builder; and it is absolutely

lutely necessary, that he should have a solid judgment, and a natural turn of mind for the business. He must have strength of body, and a good stock of money, if he proposes to set up master; and may be bound at fifteen years of age. Those of this business take 10*l.* with an apprentice; and give 15*s.* a week to their journeymen. 500*l.* at least is necessary to enable a young man to set up for himself.

Of the LINNEN-DRAPER.

THE youth, who is to be put apprentice to this business, ought to have a genteel education, as his stock, when he sets up, will entitle him to be one in the first rank of tradesmen, and as a polite behaviour is absolutely necessary to his success as a shop-keeper: His business, however, only requires his writing a fair expeditious hand, and his being well versed in arithmetic. He may be bound at between fourteen and fifteen years of age; and during his apprenticeship he should endeavour to obtain a perfect knowledge of the Linnen Manufacture in general, and the difference between the various fabrics and the properties of the different kinds of Linen. The masters take from 100 to 400*l.* with an apprentice; who, when out of his time, may get from 20 to 40*l.* a year and his board; but it will require 900 or 1000*l.* to set up master in a genteel retail shop.

Of

Of the LIVERY-LACE WEAVER.

THE Livery-Lace-weavers are those who weave the Trimming for the cloaths of livery servants; which are done in a variety of patterns according to the fancy of the masters, and are made of silk or worsted, and sometimes of both mixed. This business requires some ingenuity; and is one of the best branches of weaving to a journeyman. They take from 5 to 10l. with a lad; who, when out of his time, may get from 12 to 18s. a week. A very little will set up a working master; as their materials are found by the Worsted-men, or Lace-men, their employers.

Of the LOCK-SMITH.

THE boy, who proposes to be of this business, ought to have a tolerable share of ingenuity, and a good degree of strength; but he requires no other education, but the common one of reading, writing, and some little knowledge in accounts. The Lock-smith makes the Keys, Wards, Springs, and Plates himself, and employs the Founder in casting brass cases and knobs. The nicest part of his art is his tempering his springs. He takes from 5 to 10l. with an apprentice; who, on his being first out of his time, may perhaps earn 9 or 10s. a week; but, as he encreases in strength and experience, he may be able to get 14 or 15s. or with about 30 or 40l. he may set up for himself.

Of

Of the LONG BOW-STRING MAKERS.

THough this is the name of one of the city companies, and might have been formerly a considerable trade, it now only exists in name.

Of the LOOM-MAKER.

THE boy to be bound to this trade ought to be pretty robust, and about fifteen years of age; he should have some ingenuity; but no other education is necessary, besides that required for every mechanic. The Loom-maker is in some degree both a Smith, Joiner, and Carpenter, and is employed in making Weaving Looms, Throwing Engines for Silk Throwsters, and several other engines for mechanic uses. They take from 5 to 10*l.* with an apprentice; who, when out of his time, may get from 10 to 15*s.* a week; or with 50*l.* may set up master.

Of the LORINER, or BITT-MAKER.

THE Loriner makes Bitts and all the iron work belonging to a Bridle, together with the Stirrups. It is an ingenious and laborious branch of the Smith's business; and the beauty of the work consists in filing and polishing. They take from 5 to 10*l.* with an apprentice; who, when out of his time, may earn from 10 to 16*s.* a week; or with about 100*l.* may set up master.

Of the MALTSTER.

MALT is chiefly made of barley, and sometimes of wheat and other grain; which is done in the following manner: The Maltster steeps the grain in a cistern full of water, where it lies till the grain is soft; when it is taken out and laid on a heap till it begins to vegetate and shoot forth a spire; the heap is then spread every day larger till it has covered the Malt floor, and is kept turning every five or six hours till the grain is perfectly dry. When it is spread over the kiln, that is, in a room with a kind of open floor composed of wooden bars, covered with a cloth, with a large spreading fire of cinders in the room underneath, kept constantly burning with a moderate equal heat, till the corn is fit for the market; and is either less dried for making pale ale, or higher dried for porter. It requires great care and judgment to make the Malt properly; and is attended with reasonable profit: But little Malt is made in London in proportion to the consumption; for most of it is made in the country, shipped for London, and sold at Bear Key. This business requires from 500*l.* to 1000*l.* to set up master.

Of the MARBLE-PAPER MAKER.

THIS art is yet but in its infancy in England; Marble-Paper having been made in London only a very short time. The different colours
mixed

mixed with gum-water, or size, are poured carefully on a glutinous transparent fluid, and by means of a stick gently moved on the top, are put into the variegated wavy form desired; a sheet of paper is then carefully laid on the surface, taken off again, and laid to dry; and this is repeated till all the sheets are tintured in the same manner as the glutinous fluid in which the colours swim. This business is yet but in few hands; and it is probable they have not taken apprentices: Though there is sufficient room for extending and improving this branch of trade; as most of the Marble Paper used here is still imported from Holland.

Of the MARINER.

THOSE young gentlemen, who are put to sea with the hopes of their one day commanding ships, either in the merchants or the government's service, ought not only to have a natural inclination to the sea, and to have a strong healthy constitution, but a good deal of sagacity, native courage, and presence of mind, and also a genius for figures; without which it is impossible for them to learn the theory of Navigation, which they should carefully study at school. They should also have an early taste of letters, especially of the European tongues, which will be of great service to them, into what port soever they happen to steer. They ought to be taught geography and astronomy,

and

and be constantly kept to drawing ; which will enable them to give us the bearing of capes, and the entrance of harbours, with greater exactness than is commonly done ; and by their means we might be fully supplied with draughts of foreign animals and vegetables, views of countries, inhabitants, buildings, and whatever is necessary to give a more perfect knowledge of natural history, and of the history of the world.

The youth should also learn a polite behaviour ; which joined to the honest sincerity and social disposition, that is remarkable in the English sailors, and the knowledge acquired by visiting distant countries, would render them, wherever they came, the most agreeable companions. To all this let me add : That their minds should be strongly impressed with a sense of humanity, piety, and virtue : Qualifications absolutely necessary in those who will be exposed to great temptations, and to continual dangers ; and in those who expect to command others. The benefits of this part of their education will not be experienced by themselves alone, but by the whole ship's crew, when under their command ; by their enemies who fall into their hands, and by the nation in general, to whom they will be an honour. After such an education, a young man may be put apprentice either to the master of a vessel ; or, by interest be made mid-shipman

shipman in a man of war : In either of which cases such a youth may expect to rise, and to make his fortune.

Of the MASON.

THE boy, who is desirous of being a Mason, ought to be of a robust constitution; for his work requires both strength and ingenuity; he should have a solid judgment, and a taste for architecture. He should study geometry, which is absolutely necessary, and also drawing; in particular, he ought to be expert in drawing buildings, and all the five orders of architecture, according to their several proportions. He will have frequent use for drawing, in taking down in chalk, upon blocks of stone, from the architect's plan, the outlines of any figure, moulding, or scroll, to be cut upon it. In a word, without drawing, &c. and the knowledge of geometry, he cannot make a Stone mason; but is only fit to labour in cutting and squaring rag-stones. The Stone-mason is employed in cutting stone for building; and, being acquainted with all the orders of architecture, can cut each distinct column or pilaster, and charge them with their proper capitals and other ornaments. He is not only employed in cutting the stones into their proper shape and dimensions, with all the mouldings and cornices, but in laying them, and building the stone work of the whole edifice; and must

there-

therefore be a judge of all kinds of cements, and of the manner of using them. The Masons take from 5 to 20 l. with an apprentice; who, when out of his time, may earn half a crown or three shillings a day; and it requires from 100 to 500 l. to set up master.

Of the MAST-MAKER.

THE apprentices to this business ought to be strong and robust. They make Masts, Bow-sprits, Yards, &c. The masters take with apprentices from 5 to 10 l. who work from day light till it is almost dark in the evening, or from six till seven; in which time, a journeyman can get 15 or 18 s. a week; and it will require about 300 l. to set up master.

Of the MATHEMATICAL-INSTRUMENT-MAKER.

THIS is a very genteel and a very curious business, that requires great abilities and a very liberal education. Those of this trade keep shop, and make Air-pumps, Orreries, Globes, Scales, Quadrants, Sectors, Sun-dials of all sorts, and the whole apparatus of experimental philosophy. They ought to be acquainted with the theory and principles upon which their several instruments are constructed, as well as with the practical use of them. They employ several different hands, who frequently

quently know little of the use or design of the work; and therefore the masters ought to be thorough judges of every part. They take from 20 to 50*l.* with an apprentice; most of those who work under them can get 15 or 20*s.* a week and upwards; and it will require 500 or 600*l.* to set up a genteel well furnished shop.

Of the MERCER.

AS the Mercer, by his stock in trade, justly demands a place in the first rank of shop-keepers, the youth, who is designed for that business, ought to have a very genteel person and education, an air of complaisance, much good breeding, and a sufficient stock of patience. These, with a handsome fortune, and the being able to write a good hand, express himself handsomely in a genteel letter, and being well versed in the common rules of arithmetic, are all the previous qualifications necessary in a young man before his apprenticeship. The Mercer deals in all plain and flowered Silks, Brocades, and Velvets; and to prevent his being imposed upon by the Weavers, ought to gain a thorough knowledge of the nature, properties, and difference between the several kinds of Silks in which he deals; and for that purpose should have a general knowledge of the manner of weaving, and of the kinds of Silk that ought to be used by the weaver, both in the warp and the shoot. But of this necessary

cessary branch of knowledge the Mercers have generally no idea; though it is very easy to obtain it. They take with an apprentice from 100 to 400 l. and give their journeymen from 20 to 40 or 50 l. a year; but it will require 2 or 3000 l. at least to set up shop in a genteel way.

Of the MERCHANT.

THE youth, designed for the honourable profession of a Merchant, ought to be a perfect master of his mother tongue, and to write it grammatically; he has no great occasion for Greek and Latin; but he should render himself able to speak, and write accurately, the French, Dutch, Portuguese, and Spanish Languages; he should also obtain as perfect a knowledge as possible of geography, and be a complete master of figures and of merchants accounts. A youth thus educated is fit for the compting-house of any merchant; where during his clerkship he may learn the practical part of Commerce.

A Merchant ought not only to understand goods and merchandise in general, and to be a judge of every particular commodity in which he deals; but must know mankind, and be acquainted with the different manners and customs of the trading nations: He must know their different products; the properties of their staple commodities; their taste
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in the several sorts of goods they want; their principal marts and markets; the seasons proper for buying and selling; the character and disposition of their traders; their coins, weights, and measures; their particular manner of keeping accounts; the course of their exchange; their peculiar mercantile customs and regulations, relating either to payments, buying or selling; the common arts, tricks and frauds, put in practice by the dealers; the duties chargeable at their several ports; their methods of entry and clearance. In a word, he must be well acquainted with the situation, manners, and customs of all the nations with whom he trades. The Merchants take with a clerk from 100 to 500*l.* and it requires at least 3 or 4000*l.* to engage in a considerable foreign trade to any great advantage. The clerk, with the above qualifications, if he has not the money necessary to commence Merchant, may, after his time is expired, earn a genteel living in any part of the wor'd: He may serve as a clerk in a compting-house at home, in which case, he may have from 50 to 70 or 100*l.* a year and his board; or may do much better, by going abroad as super-cargo; or, by settling in any of our plantations, or trading cities abroad, as a factor; where, by strict integrity and application, he may raise money, and at length commence merchant.

Of the METZOTINTO ENGRAVER.

THIS art was invented by prince Rupert, nephew to king Charles I. It is very different from the common method of engraving on copper; and is thus performed: A copper plate being polished is cut in jagged lines from corner to corner, both cross and length-ways, till the whole is rendered of an equal roughness. The plate thus prepared is then blacked over with burnt cork, and the outlines of the picture drawn with chalk upon this black surface. A drawing of the design lies before the artist, who copies it by scraping off the roughness on the plate; by which he gives the figure with all its shades: Those scraped deepest appear the lightest; and where the plate is made smooth it is quite white. The artist ought to have all the qualifications of a Painter, and to be a perfect master of drawing in perspective, and the manner of properly disposing the lights and shades. He should have a good eye, a nice hand, and a clear judgment. Those of this business take from 20 to 40l. with an apprentice; who may commence master with little money, or may gain as journeymen, if good hands, 30s. a week. This art is not yet brought to its highest perfection.

Of the MILLER.

THIS business requires no other qualification but strength. There are but very few Millers within the bills of mortality ; but there are some, particularly for grinding corn for the Starch-makers. They take 5 l. with an apprentice ; give only about 10s. a week to the men who look after their mills ; and require from 200 to 300 l. to set up master.

Of the MILL-MAKER.

THIS business requires strength ; and if the boy, who is put apprentice to it, obtains first the knowledge of mechanics, it will be of great service to him ; as he may, when a master, meet with many profitable jobs, out of the common road of his business ; which is the making of hand Mills for the Corn-chandlers, and coffee Mills for the Grocers. The Mill-makers take from 5 to 10 l. with an apprentice ; who, when out of his time, will have the common wages of a Smith ; unless he sets up master, which he may do with 50 l.

Of the MILLINER.

THE girl, designed for this employment, ought to have a genteel person, and be capable of a ready address ; she too should write a tolerable hand, understand the first rules of arithmetic, work quick and well at her needle, and have some fancy

and imagination. These qualifications, joined to strict modesty and justice, will hardly fail of procuring, in this branch of business, a comfortable and genteel support; and I know none fitter for the daughters of numerous families, where the parents live handsomely, yet have no fortunes to leave their children: But the young women put to this employ should have their minds strongly tinged with a high idea of the dignity of chastity; for in this, as in almost all shop-keeping businesses, they will be exposed to the attempts of designing men; many of whom glory in one of the most shameful acts of baseness, that of betraying to ruin heedless and unwary innocence. Women's best defence is private life; but where circumstances oblige them to come into the world young, the utmost care ought to be taken of their morals; and they should be taught to revere themselves, or, in other words, not to render themselves cheap, by little coquettish compliances. The girl that will patiently listen to, or join in the laugh with the young spark who makes loose allusions or impudent jests, is not far from falling a prey to the first artful seducer who shall take it in his head to seem enamoured with her beauty or wit.

The Milliner deals in a great variety of articles principally for ladies wear; such as all manner of Head Dresses, Ruffles, Handkerchiefs, Tuckers,

Tippits, Gloves, Necklaces, Earrings, Flowers, Pompoons, Egrets, Cambricks, Lawns, Laces, Ribbons, &c. But this trade is not wholly confined to women, since the beau and fine gentleman has his Solitaire or Stock, his Watch or Cane-string from the pretty Milliner; perhaps for nothing but that he may have an opportunity to stare the modest girl out of countenance, or to tempt her, by soft insinuations, to add one to the number of those he has betrayed to infamy and ruin. It is these pests of society that oblige us to give the above cautions. A Milliner, in good business, will not take an apprentice with less than 40 or 50l. but one, in a lesser way, will take with a girl 20 or 30l. Their friends find them in apparel during their apprenticeship; which is commonly only five years. To set up genteely will take 400 or 500l. but there are many who get a very good subsistence by being what are called Chamber-milliners, and keep no shops. They require a large acquaintance among people in genteel life; who frequently find their own materials, and give them to the work-woman to make up: But the Shop-milliner, who sells the goods of which their dresses are made, has greatly the advantage in point of profit. As journey-women they may get from 15 to 30l. a year and their board, according to their abilities and appearance.

Of the MILL-WRIGHT.

THE Mill-wright is an ingenious and laborious business; in which there is great variety. The boy, who is designed for it, ought therefore to be strong and ingenious, and also to have some knowledge in the laws of mechanics; that he may perfectly understand the principles upon which Mills are constructed. The Mill-wrights take from 5 to 10*l.* with an apprentice; who, when out of his time, may set up with about 100*l.* but, if he works as a journeyman, he will have the common wages of a carpenter.

Of the MONEY-SCRIVENER.

THOSE of this business are employed in finding out estates to purchase, in disposing of great sums on mortgages, &c. We have already given an account of this trade in treating of the Conveyancer.

Of the MUFFIN-MAKER.

THIS business has but of late years been carried on in shops; but they are now pretty numerous. The Muffins are cakes made of very white flower, and used at the tea-table. It is a tolerable business for a master; though a poor one for a journeyman. They take poor lads from the parish or others with no money; who the first part

of their time cry the Muffins through the streets early in the morning, and again in the afternoon; and also work hard when they are making these cakes.

Of the MUSIC-SHOP.

THE boy, who is put apprentice to this trade, ought to have an ear for Music; and should, before he enters into this business, know something both of the theory and practice. His friends should also take particular care to put him to a master who plays finely on some instruments; and this is the more necessary, as there are some of these who can scarcely hum a tune in proper time, and take apprentices only to keep shop, and not to learn them any thing relating to Music. These shops sell all sorts of Music Books, Songs set to Music, and all kinds of Musical Instruments. They take about 20 l. with an apprentice; employ almost no journeymen; and require 4 or 500 l. to set up a handsome shop.

Of the MUSICIAN.

THE youth, who is to obtain a living by teaching Music, or by being a performer, ought undoubtedly to have the natural qualifications necessary to the art; a very delicate ear, and light slender fingers; and these qualifications should be early improved by a good master, at a time when the

the joints of the fingers are most pliable, and acquire a natural facility in the performance. The youth, in learning this science, is not to be put apprentice, but to attend different masters at the expence of his friends, till he has acquired great skill, both in the theory and practice; after which, he may be employed as a Composer of Music: He may teach gentlemen and ladies to sing, or play on Musical Instruments; may become Organist to a church, or gain a living by playing at one of the Theatres, Vauxhall, &c.

Of the NEEDLE-MAKER.

THE boy, intended to be put apprentice to this business, does not require much strength or learning; but he ought to have good eyes, a pretty light hand, and a good deal of activity and swiftness in his motions. The steel is drawn in wire to the fineness of the needle designed, cut into lengths, the eye struck with an instrument, the point filed down, and the finer sorts polished. They take about 5 l. with an apprentice; who, when out of his time, may earn 2 s. or 2 s. 6 d. a day; or with less than 50 l. set up master.

Of the NEWS-HAWKER.

THE News-hawkers are those who carry the News-papers from house to house. Mean as this trade may seem, there are many who gain a

good living by it. Some, by mere dint of industry, get themselves customers; but the most common way is to buy a walk of those who have more business than they can do, or are grown old and infirm, or of the survivors of those who are dead: For this walk they give in proportion to its extent and the profits gained by what is sold; sometimes the sum of sixty guineas. They take apprentices, and employ poor lads to carry their papers; who in time become Hawkers themselves.

Of the NET-MAKER.

THIS is a branch of business dependent on the Fishermen, for whose use they chiefly make Nets; though they also make Nets for Fowling, and also Nets of silk, &c. for horses. It is a business that requires neither much strength nor ingenuity. The masters take from 5 to 10l. with an apprentice; who, when out of his time, will be able to earn from 9 to 12s. a week.

Of the NET-SHOP,

THIS business requires only a common education: There are but few of this trade; and those sell all sorts of Nets, which are pretty numerous for the Fishery, with those for horses, and other uses. They also deal in small cordage, lines, &c. Some of them keep large shops, employ many Net makers, and are considerable traders. They usually

usually take about 20l. with an apprentice; pay a journeyman 20l. a year and his board; and to set a person up in a proper manner will take from 300 to 500l.

Of the NOTARY-PUBLIC.

THE youth, designed for this business, ought to have an extensive genius, and a penetrating judgment: He should not only be a perfect master of figures and merchants accounts; but should be able to translate both from the Latin and from all the trading languages, as French, Dutch, Spanish, Portuguese, and Italian. The Notary-public, though he keeps shop, is a kind of Lawyer, only he is solely conversant in the law of Merchants; that is, in the general rules and customs observed among Merchants in their dealings with each other. He is employed in matters relating to Bills of Exchange; in protesting such Bills as are not accepted, or not duly honoured when accepted. He ought to know the Course of Exchange in all the chief trading cities, and the usage of payments. He translates foreign instruments; is employed in settling accounts between factors and their employers, masters of ships, supercargoes, and their owners; in drawing and ingrossing indentures, articles of copartnership, of trade, charter parties, and in general in all deeds and writings relative to trade. Those of this business have from 50 to 100l. with an apprentice; who, after having served his time with a Notary of reputation and great practice, can never fail, if it

be not his own fault, of a handsome subsistence; since, if he does not set up for himself, he will be always fit for the compting-house of any Merchant; and will be preferred on account of his knowledge in the most intricate part of commerce, and particularly in negotiating Bills of Exchange.

Of the ORGAN-BUILDER.

THE boy, designed for this business, ought to have a pretty good ear, and some skill in music: For the Organ-builder not only performs some of the work, but fixes up the Organs in such a manner as to give every pipe its proper sound. This is a profitable branch of business, where the master has sufficient custom. The Organ-builder takes from 10 to about 30*l.* with an apprentice; who, when out of his time, may earn above 20*s.* a week; or, with about 200*l.* may set up master.

Of the OILMAN.

THE qualifications required in a boy designed for this trade are only those necessary for every other shop-keeper. The whole mystery of the business consists in knowing the buying and selling prices, and making up a few common Pickles. The Oilman deals not only in Oils for the use of other trades, but in all sorts of Pickles, either imported or made at home, and in Soap, Salt, and many other articles for the use of the Kitchen. Those of this business take from 20 to 70*l.* with an appren-

apprentice; according to the extent of their trade; and require from 100 to 1000*l.* to set up master.

Of the ORANGE-MERCHANT.

THIS business requires no greater abilities than the former. The Orange-merchant imports Oranges, Lemons, Spanish Onions, Nuts, and other articles from Spain; which he sells again either packed up in slight chests, in the manner in which he receives them, or by retail. The Orange-merchants keep shops: But there are only few of this business; and these take from 100 to about 300*l.* with an apprentice; who, when out of his time, will require upwards of 1000*l.* to set up master.

Of the ORRICE-WEAVER.

THE qualifications necessary in the boy designed for this business are a lively apprehension, a good degree of strength, on account of the heavy treadles he is obliged to move with his feet, a dry, cool hand, free from sweat, that he may not tarnish his work, and some notion of drawing, that he may design his own patterns on paper, by representing the figure and number of threads to be wove, in order to raise it on the lace. The looms are constructed much in the same manner as those of the Damask Weavers, only allowing for the narrowness of the work; and the workman raises the figure upon gold and silver lace, by the same principles.

ciples. The Orrice-weaver takes from 5 to 10 l. with an apprentice; who may earn, if a good workman, about 18 s. a week; or, with 50 or 100 l. may set up master.

Of the OPTICAL INSTRUMENT-MAKER:

A Boy, designed for this ingenious business, ought to have a philosophical turn of mind; and before he be put apprentice should acquire some knowledge of Optics; which he may afterwards carry to perfection, by carefully studying Sir Isaac Newton's inimitable performance on that subject. The Optical Instrument makers in London keep handsome shops, and sell all kinds of Optical Instruments; as various sorts of Telescopes and Microscopes of different structures, Lenses, Spectacles, Burning-glasses, and all other Instruments invented for the help or preservation of the sight, or for making Optical Experiments. Those of this trade execute very little of the work, except grinding convex glasses on a brass concave sphere, and concave glasses on a convex sphere of the same metal. These are ground with sand, and polished with emery and putty. The cases and machinery of their Instruments are made by different workmen; and the Optician prepares and fixes the glasses to them: He ought therefore to be thoroughly acquainted with the nature of the several Instruments he is obliged to make; and to be a perfect

perfect judge of such work as he employs others to execute. This business is sometimes joined with that of the Mathematical Instrument-maker. The Optical Instrument-maker takes from 20 to 50l. with an apprentice; who, when out of his time, may earn about 20 s. a week; or, with 500l. may set up master: Though there are some who employ three or four times that sum in this ingenious and profitable trade.

Of the PACKER.

THE boy, who is put apprentice to this business, ought to have strength of body, and no other qualifications are necessary, more than a common education; being able to write a good hand, and being well versed in accounts. This is esteemed a very reputable trade. It consists in packing up all sorts of bale goods into proper parcels fit for exportation. It requires 4 or 500l. to set up in business; and some of them make use of several thousands. They take with an apprentice from 20 to 100l.

Of the PACKTHREAD-SPINNER.

THIS business requires as little education as any other, and as small abilities as any rational being can be supposed to possess. Packthread is spun and twisted together much in the same manner as ropes. The Packthread-spinner fastens one end of two threads to two spindles of a wheel; the hemp, or coarse flax, which ever he uses, is turned round
his

his waist, and he retires backward from the wheel spinning out both his threads as he goes, till he reaches the farther end of the walk; the wheel being turned by another hand: This being done, the threads are twisted together. Those of this business take about 5 l. with an apprentice; who, when out of his time, may get 12 or 14 s. a week; and it will require about 60 l. to furnish a shop and enable him to manufacture his own goods.

Of the PAMPHLET-SHOP.

THIS business is principally carried on by women, who keep little shops in the most populous parts of the town; as at the Royal-Exchange, Temple-Bar, Charing-Cross, &c. They sell all kinds of News-papers, King's Speeches, Votes of the House of Commons, Single Plays, Pamphlets of all sorts, Almanacks, Memorandum Books, or indeed any Book if bespoke; though they keep but few bound ones by them. This employ is abundantly profitable in a good situation, as the return is exceeding quick; but it entirely depends on the place where the shop stands; since no diligence or industry can bring trade of this kind to a street or lane where News-papers or Pamphlets have not usually been sold; and the dead stock, if there is not a brisk trade, will more than eat out all the profits. These shop-keepers take no apprentices, but hire boys by the week to run of their errands, neither have they journey-

journeymen or journeywomen. If a person is so happy as to get a shop in a proper place, diligence and 100l. will enable him or her to get a good support; for as it is only buying and selling at a fixed price, it is easily learnt, and requires no abilities but writing, accounts, and an obliging behaviour.

Of the PAPER HANGINGS-MAKER.

THIS being a very extensive business that has been lately much improved, and may be still carried to a higher degree of perfection, it requires a boy of genius, who has learnt to draw, and has a taste for painting; and as they now make landscapes, ruins, and sea-pieces, as the ornaments of chimney-pieces, some knowledge of perspective is also necessary. Hanging Paper is made in several different manners. Some is printed upon wooden blocks, and coloured by placing paper over it, cut out in holes in the form of the figures or parts of the figures where they are to be laid on; over these holes the artist moves a large brush dipped in any colour, and removes the paper as he proceeds, till the whole piece is finished; and then begins again with other papers cut so as to admit other colours, proceeding in the same manner till the whole piece is completed.

Other kinds of Paper Hangings are made without their being first printed on blocks, solely by means of papers cut into sprigs and flowers, &c. which are laid on as in the other case, and the figures

gures represented on the paper by brushing over these patterns; which are removed as before, till all the different colours and shades are given, and the work completed : After which, if the work is desired to be curious, it is touched up by mending the defects, and giving it proper hightenings, &c. with the pencil.

Flock Paper Hangings are made in much the same manner. They take flocks, which are the cuttings of the rough nap taken off by the Cloth-dresser; this they chuse of the proper colours, and cut it with an engine as fine as possible; the figure is then represented on the paper with a strong varnish; and while it is yet wet and sticky, the flocks are scattered upon it; when that which falls upon the varnished part sticks, and represents the figure designed, and the rest that falls upon the dry paper is shaken off. If the Paper is to be of several different colours, as reds, greens, blues, and yellows, the pattern for one of these is drawn with the varnish, and the flocks spread over the whole piece; which being afterwards thoroughly dried, the shades of the same colour are afterwards separately added, and then the other colours with their shades. In this manner paper of this kind may receive as many colours as you please. Those of this business now keep very handsome shops. They take 20l. and upwards with an apprentice; who, with about 200l. may in their turn set up master of a shop; or receive, if a good hand, about 20s. a week by being a journeyman.

Of

Of the PAPER-MAKER.

THough several of the principal Stationers of London have mills with which they make their own paper; yet, as this business requires much water, and a great deal of room, it is always carried on in the country. This art, which has been lately so greatly improved, as almost entirely to exclude the importation of foreign Paper, requires both ingenuity and strength; in particular the boy ought not to be of a tender constitution, nor be apt to get cold by dabbling in water; but no extraordinary education is necessary to prepare a boy to excel in it. Paper is made of linen rags, separated into parcels. These used to be formerly beat into a pulp, by means of large heavy hammers, whose heads were raised up by cogs fixed in the axis of a water wheel: But they are now more expeditiously ground to pieces, by means of an iron barrel covered with teeth, fixed on the inside of an iron cylinder, and turned by the same wheel, which also supplies the mill with water. When the rags are thus reduced to a proper consistence, the pulp is poured into a large vessel, and the artificer takes the mould of a sheet of paper of the size of that to be made. This mould is an oblong square of wood, the bottom of which is composed of fine brass wires, fastened parallel to each other, and some of them are disposed in the form of the figure discovered in the paper when it is held up to the light.

This

This frame the artist holds in both his hands, and plunging it into the tub, suddenly takes it up again with an even motion; the water running through the spaces between the wires, nothing remains in the mould but the beaten pulp, in a thin coat, which, being placed on a cloth, is removed under a large standing-press; as fast as the sheets can be removed, the artist prepares fresh ones, till at length a great heap of this new made Paper, with a cloth between each, being in the press, that is worked down upon it, and squeezed with great force, by turning the screw by means of a long round iron bar. After some time the paper is taken out of the press, and hung upon poles to dry; which being completed, it is told out into quires, doubled in the middle, pressed again, and packed up into reams or bundles for sale. The Paper-maker takes with an apprentice from 5 to 10*l.* and allows a journeyman 15 or 18*s.* a week; who requires 4 or 500*l.* to enable him to set up master.

Of the PATTEN-MAKERS.

THESE keep shops, and make wooden Clogs as well as Pattens. It is an easy light business; requires few talents, and very little learning is necessary. It is enough, if the boy designed for it, can write a plain hand, and understands the first rules of arithmetic. The masters take 5 or 10*l.* with an apprentice; who, when out of his time, may

may earn 12s. a week; or set up with less than 100l.

Of the PASTRY-COOK.

THIS is a profitable business, and requires a boy of activity and industry. The Pastry-cooks of London have many of them shops elegantly fitted up with carved work, gilding, busts, and looking-glasses. They daily make all kinds of Pastry, and sometimes also deal in Confections and Jellies. They take 10 or 20l. with an apprentice; who, when out of his time, may have about 20l. a year and his board, by serving as journeyman; or if he sets up master, it will require 300l. at least to fit up a genteel shop, and build ovens, &c. But he may set up, in a less splendid manner, with about 100l.

Of the PATTERN-DRAWER.

THE boy, designed for this business, will have much better success if he has a taste for drawing and painting; which he may improve before he is put apprentice: And this is all the education necessary except reading, writing, and common arithmetick. Those of this business are employed in drawing Patterns for the Weavers of Brocades, Damasks, &c. for Callicoe-Printers, Embroiderers, Lace-Workers, Quilters, and several little branches belonging to women's apparel. They draw patterns
upon

upon paper, which they sell to those workmen who have occasion for them. They also draw upon men's waistcoats, upon women's petticoats, and other wearing apparel, for the Embroiderers. This business is divided into several branches, who draw for particular artists. They take from 10 to 50 l. with an apprentice; who, when out of his time, may get three or four shillings a day, and have pretty constant business: nothing more is necessary in order to set up master, but an acquaintance with those who employ the Pattern-drawers.

Of the PAVIOUR.

THIS business requires great strength, and but little ingenuity. It is dirty and laborious, but profitable to the master, who takes about 5 l. with an apprentice. The journeymen earn 15 s. a week, and with 100 l. may set up masters.

Of the PAWNBROKER.

THE boy designed for this trade ought to write a plain quick hand, and to be well versed in the common rules of arithmetic: besides which, he should have an incorruptible integrity, and a good deal of judgment and acuteness, to enable him to learn the value of the great variety of goods that will be offered him as pledges. He takes 20 l. with an apprentice, who, when out of his time may

may have 20 l. a year, and his board ; but it will require 1000 l. to set up master.

Of the PEN-MAKER.

SIMPLE as the art of making a Pen is, yet it is a distinct trade of itself ; and though it requires very little genius or learning, yet there have been, and still are, very ingenious men of this business ; who have known how to use the pen for the instruction of mankind, as well as to make it for sale. The Pen-maker takes 5 or 10 l. with an apprentice, who, when out of his time, may set up for himself ; but it affords only a narrow support : the master Pen-maker sells his pens by the hundred to the stationer.

Of the PENCIL-MAKER.

THIS business, like the former, requires very little ingenuity or learning. They make Pencils of different sizes, of black lead, and of red chalk, and sell them to the stationers, printshops, and hardwaremen, who sell retail. They take 5 or 10 l. with an apprentice ; who, when out of his time, may earn 12 or 14 s. a week, as a journeyman, or, with less than 50 l. may set up master.

Of the PERFUMER.

THIS is a pretty genteel trade, that requires a boy of a polite behaviour ; but he has no occasion for much genius or learning. The Perfumer

fumer sells all sorts of Perfumes, fragrant Oils, Powders, Essences, Washes, Soap, and Pomatums ; they employ labourers in the most laborious part of their work ; but though they keep handsome shops, they seldom take apprentices, or employ journeymen regularly bred to the business. A master may set up handsomely with about 200 l.

Of the PEWTERER.

THIS is an ingenious business, that requires strength ; but is very unhealthy from the fumes of the metal, which are apt to render the workmen paralytic. Pewter is a mixed metal, made of lead and tin. The Pewterers cast their work in moulds, and afterwards turn them with a lathe peculiar to themselves ; after which, the plate, dish, or other vessel, is planished with a hammer, the face whereof is of case-hardened steel, nicely polished. They keep large shops, and take from 20 to 50 l. with an apprentice ; who, when out of his time, may earn from 15 s. to a guinea a week, or with 500 l. may set up for himself.

Of the PICTURE-FRAME-MAKER.

THIS business requires little genius, and neither much learning, nor any great degree of strength. The masters keep shop, and make square frames for prints ; those that are round, or oval, being made by the Turner. These frames they
either

either make with a black moulding, a bead of gold, or some other slight carving, and gilding. They take from 5 to 10 l. with an apprentice; who, when out of his time, may get about 15 s. a week, or with 50 l. become master. For the Picture-Frame Makers, who work for the Portrait Painters, see the article *Glass and Picture-Frame Maker*.

Of the PIECE-BROKER.

THIS, like all other businesses that merely consist of buying and selling, requires neither any extraordinary genius nor learning. They keep shop, and buy shreds and remnants of cloth of the tailors, which they sell again, to such as want them for mending, &c. They do not usually take apprentices, nor are they regularly bred to the business; they are generally decayed tailors, or some cunning men, who have crept into the secrets of this profitable, and very often dishonest, trade.

Of the PIN-MAKER.

THIS is an art that requires very little previous learning. The Pin-Makers of London keep shop, and some of them carry on a very great trade. The work, for the greater dispatch, is carried on by different hands; one hand being employed in cutting the brass wire into proper lengths for the size of the Pins, a second in making the heads, a third in putting them on, and a fourth in pointing them.

them Every one of these work with surprizing swiftness. Those masters who work privately, and chiefly for the shops, take 5 or 10 l. with an apprentice; who must work from six to nine: when out of his time, he may earn in those hours 12 or 14 s. a week; or with 50 l. may set up master. Those who keep shop, take 20 l. with an apprentice, and employ women in sticking the pins on paper, a sheet of which holds five hundred: these masters employ 500 l. and some of them above 1000 l. in trade.

Of the PLAISTER OF PARIS FIGURE-MAKER.

AS this business is commonly managed, it requires very little ingenuity, and but few acquired accomplishments; but if the boy has a genius, and understands drawing, he may, in many cases, make his own models. Plaister of Paris is made of alabaster, first pounded, and then burnt; after which it is mixed with water, till it becomes of a due consistence, and in less than a quarter of an hour, acquires a hardness not much inferior to stone. Those who work in this Plaister, when they make a bust from the life, apply a quantity of talc to the face and parts to be represented; the concave impression of the face being left in the talc, Plaister of Paris is run into it, which instantly receives the convex figure. When the workman designs any other figures, he has a model made of wood by the carver,

carver, of the exact proportion of the intended figure; from whence he takes the impression in the same manner as from the life. If his figure consists of many involved members, the figure is divided into parts, and cast separately, and these are afterwards joined to make up the whole design. Some of this business keep shop: they take from 10 to 20 l. with an apprentice; who, when out of his time, may earn 20 or 25 s. a week, or set up with 50 l. though if he takes a shop, and would make a handsome appearance, it will require 300 l.

Of the PLAISTERER.

THE boy designed for this business, ought to have a quick apprehension; and a good deal of strength, especially in his arms, on account of his being obliged to work much above his head: if he is an ingenious boy, he may, when out of his time, perform some of the business performed by the workers in stucco. As to his education, it is absolutely necessary, that besides writing and common arithmetic, he should be well versed in mensuration, as he is paid for plaistering and whitewashing by the square yard. The masters take with an apprentice from 5 to 10 l. he works from six to six, in which hours a journeyman may earn from 2 s. 6 d. to 4 s. 50 l. will furnish him with tools and stuff sufficient to begin with as a master, and what he wants more will be in proportion to the extent of his business, and the credit he thinks

proper to give. Plaisterers are generally out of business about four months in the year, except in jobbing.

Of the PLANE-MAKER.

THIS business requires a tolerable degree of strength, some genius, but no more than a common education is necessary. The Plane which is of such general use in all the branches of Carpentry, Joinery, and Cabinet makers work, is a tool so different in size and shape, and requires such exactness, that the making of the wood work is a separate employment; but there are not many of this business. The masters take from 5 to 10l. with an apprentice, who works from six to eight; and, when out of his time, may earn 16 or 18s. a week; or, with 50 or 100l. may set up master.

Of the PLATE-CASE-MAKER.

THIS business requires some ingenuity, but no extraordinary learning. It consists in making very neat chests of various forms and sizes, for holding gold and silver plate. The masters take 10 or 15l. with an apprentice; who, when out of his time, may get about 18s. a week; or, with about 50l. may set up master.

Of

Of the PLUMBER.

THE boy, designed for this business, ought to have strength of body, and a healthy constitution, to withstand the unhappy effects of the lead. The Plumber casts Leaden Pipes, Sheets of Lead, and sometimes Leaden Statues. In casting Leaden Cisterns, he makes use of a long kind of trough of a proper breadth, covered at bottom with sifted sand, which is laid perfectly level. On this sand the impression is made of the mouldings that are to go round the front of the Cistern, by pressing upon it a wooden moulding of the same form; and the other ornaments usually seen on Cisterns, as any kind of beast, or bird, are also impressed in the sand from leaden or wooden figures made for that purpose. This being done, a more than sufficient quantity of Lead is melted in a copper, and afterwards laded into a strong wooden vessel at the end of the trough, or long bench, with a board on each side, which extends the whole breadth; and being filled, the Plumber takes hold of the long end of a lever fixed to the ceiling, to the short end of which is a chain fixed to the vessel filled with lead, and in an instant he turns the lead into the trough. He then immediately takes a strong thick piece of wood, made to bear upon the sides of the trough, and to approach so near to the sand, as to leave a vacancy answerable to the thickness of the sheet of Lead: This kind of strickle he puts

into the trough, and another person taking the other end, they swiftly move along, sweeping the melted Lead before them, till reaching the other end, the remainder falls into a receiver. In this manner all sheets of Lead are cast; only no figures or mouldings are impressed in the sand. The cistern being thus cast, the sides are doubled up from the front, and bent again to form the back, where they are soldered together; and then the bottom is cut out of a sheet of Lead, and soldered on.

They cast Pipes in a cylindrical tube of about a yard long, which stands on one end, has hinges, and can be opened and shut. This tube has a round piece of iron that runs through it. Into this tube they pour the melted Lead, and instantly plucking out the iron, by means of a lever, to which it is fixed by a chain, they open the tube, take out the pipe, and instantly shutting it, put in the iron, and cast another as before. These Pipes, when used, are afterwards made of any length, by being soldered together.

The Plumbers take from 10 to 20*l.* with an apprentice; who, when out of his time, may get 15*s.* or a guinea a week; or, if he has 100*l.* he may set up for himself.

Of the PORTERS.

THERE are in London two sorts of regular Porters, who go of errands and carry burthens. The Tackle Porters, who are employed about the keys and wharfs, and assist in loading and unloading goods from the ships; and Ticket Porters, who have a pewter or silver badge, with their name upon it, hanging to their breasts or aprons. Both these classes have the honour of being city fraternities; and the last must not only be free of the city, but give two sureties in an hundred pounds for their honesty. They are generally employed in carrying goods from the wholesale dealers to their customers; and very heavy burthens to the country waggoners. There are other Ticket Porters who never carry burthens, but are solely employed in carrying letters, notes, and small parcels; these are entrusted with large sums of money, which they are frequently sent to receive. All the Porters in general, however slavish and servile their employment, get more money than many of the most ingenious artificers; and will not be employed by the day, without being paid a crown for their labour. They take no apprentices.

Of the PORTRAIT-PAINTER.

THE ingenious youth, who is desirous of embracing this genteel profession, ought to have a liberal education, an engaging address, and a natural

tural taste for drawing and painting, improved by early practice and the ablest masters. He should have money sufficient to enable him to subsist like a gentleman, till he can make his merit known, or, in the room of it, the patronage and friendship of some of the great. The fine Portrait-painters take no apprentices; and therefore the youth, after first drawing from prints, and then from statues, must proceed to copy the human face, and then make his way in the world by the assistance of his friends and his own genius; and if he is able to get much employment among persons of distinction, he may live happily, and raise a handsome fortune.

Of the POTTER.

THE youth designed for this business, if he proposes to set up for himself, and to have the necessary qualifications for carrying the work to the greatest perfection, ought to have a fortune of at least 1000*l.* and to be a tolerable master of the art of drawing, previous to his going apprentice; and, if it be practicable, he may find it worth his while when out of his time, to work for a twelvemonth as a journeyman in Holland. In the making of all earthen vessels, the workman has the clay purified, moulded to a proper stiffness, and made up in lumps according to the size of the vessel to be formed. The artist sits before a bench, in which is fixed a piece of level wood not unlike a trencher; upon

upon this piece of wood he places one of the soft lumps of clay, and placing his knuckles, or only his finger and thumb upon it, whirls it round by means of a wheel worked by his foot, and in a minute raises the clay into the form desired; then by clapping a piece of wood to the outside, he in a moment gives it what circular mouldings he pleases. After having finished a great number of vessels, they are set to dry; and afterwards, if they are designed to be painted, the colours are laid on, which must be of the metallic kind. The vessels are then washed over with a large brush dipped in a preparation of lead mixed with water, in order to form the glazing; and when dry, placed in the furnace, and burnt; when, what is thus washed over the vessel, vitrifying by the intense heat, the paint is seen through it. The masters take from 5 to 10*l.* with an apprentice; who works from six till nine: A good hand earns, by being a journeyman from 15 to 20*s.* a week; and the masters employ from 1000 to 4000*l.* and upwards in trade.

Of the POULTERER.

THE whole mystery of this business consists in knowing how to buy fowl to the best advantage; in picking and drawing them; and in gaining a profit by selling them. It therefore requires no extraordinary genius; and nothing but an obliging behaviour, and the common learning of reading, writ-

writing, and a little arithmetic. The Poulterer takes 5 or 10l. with an apprentice; and pays a journeyman ten or twelve shillings a week. About 20l. will enable a young man to become master.

Of the PRESS MAKER.

THOSE of this business make Presses of various kinds, for the use of different artificers, as the Packers, Book-binders, &c. The Press-makers are divided into different classes; some working for one or more trades, and others only making Presses for the use of other trades, that require a different construction. This business requires some ingenuity, especially in the turning of large wooden screws, and in finishing all their work with the necessary exactness. They take about 10l. with an apprentice; who, when out of his time, may earn 15 or 18s. a week; or, if he has 100l. he may become master.

Of the PRINTER of STUFFS.

THIS is a hot laborious business, that requires no great ingenuity in the workman. The impressing figures on woollen stuffs is performed by a rolling-press, in the manner of copper-plate printing, only the upper roller, which is large, is wrapped round with a copper plate, on which the figures to be represented on the stuff are deeply engraven.

graven. The inside of this roller is hollow, and filled with fire, which is put in at one end, where there is a grate. The journeymen earn from 12 to 15s. a week; and it requires 4 or 500l. to set up master.

Of the PRINTER of BOOKS, &c.

THIS business is in London divided into two branches, both under the care and management of the same master; who takes apprentices to each branch: These are the Compositors, who compose or set the letters; and the Pressmen, who work off the sheets at the Press. Under the article Letter-founder, we have given some description of these letters, and have observed, that they are pieces of metal with the impression cast in relief at the end. Besides these letters, there are also spaces, which having no impression at the end, and being shorter than the types, are placed to form the distances between the words; and little blocks of metal, called quadrats, which also standing lower than the letters, form the breaks at the end of paragraphs, and filling vacant spaces support the letters, which, standing on an end, would easily fall down; and the whole page would be unavoidably thrown into confusion, were it not rendered square and solid, by every vacancy seen in the print being filled up with great exactness.

These letters are disposed in two cases consisting of square divisions, placed sloping one above the other. The uppermost contains the capitals and small capitals, laid in alphabetical order, with the figures, and marks of reference, *, †, &c. In the lower case are all the smaller letters; those most used having the largest boxes, and being placed nearest the hand; here are also boxes for the spaces, &c. The Compositor, having distributed the letters into the proper boxes, lays the written copy before him, and taking a small frame of iron or brass, called a composing-stick, which by a slide is made to the exact length of the line, he holds it in his left hand, and beginning to read, picks up the letters one by one, places them in the composing-stick, and having finished a word puts in a space, and proceeds to the next; in this manner he goes on till he has finished the line, which he fills up to the exact length, by altering the spaces between the words. When the composing-stick is full of lines, he empties it carefully into a wooden frame surrounded with a ledge, about half the height of the letter. This frame is called a galley; and having finished a page, he carefully ties it up with a piece of strong twine, and placing it upon a piece of paper on a bench under his cases, proceeds to the next page. Having finished as many pages as will make a sheet, he places them in the proper order upon a smooth level stone, and puts over them an iron frame, called

called a chase. Round these pages are placed slips of wood to support the pages at exact distances, so that the pages on each side of the sheet may fall exactly on the other. The pages on both sides of the sheet, being thus inclosed in iron frames are fastened in them by the help of wedges; when each form being lifted off the stone is carried to the printing-press, and laid upon a stone fixed in it. The Press-man then takes two large balls of leather stuffed with wool, with each a wooden handle; with one of these balls he touches a thick glutinous ink, made of lamp-black and boiled linseed oil, spread on the ink-block, which is fastened to the cheek of the press, and then working the two balls together, distributes the ink equally upon each, which having done, he beats both the balls with a swift and regular motion over the face of the letter in the press, lays a sheet of moistened paper on the letter, throws a double piece of fine blanket smooth upon it, and then rolls the carriage of the press, which contains the stone, form, sheet of paper, and flannel, under the platten, a square block of smooth wood, moved up and down by means of a worm-screw, and pulling the handle fastened to his screw, the flannel presses the paper upon the face of the letter, and makes it take off the ink. If the form is too large to be covered by the platten at once, the platten is raised by putting back the handle, and the form being turned a little farther

under it, another pull is given to the bar or handle; and then the carriage being turned out, the blankets are taken away, and the sheet pulled off, one side being printed. The impression of the other form is taken off the same manner on the other side of the sheet; and then this sheet, which is called the first proof, is sent to the master or corrector, who reads it by the copy, and marks the Compositor's mistakes or oversights in the margin. This being done, the proof is returned to the Compositor, who placing one form at a time on the imposing stone, loosens the letters; and having corrected all the errors, fastens the letters as before; and the forms being again carried separately to the press, another proof is printed, and sent to the author; who having returned it back with his corrections, these are rectified, and this last proof revised. After this, the whole impression is worked off, much in the same manner as that in which a proof is pulled, only, instead of laying the sheet upon the letter, it is placed upon a sheet of paper fastened on a frame, on which is stretched a skin of parchment, which is now moistened, and is called the tympan, from *τυμπανον*, a drum; on the back side of this parchment is a double piece of fine flannel smoothly spread, which is fastened in by another frame of parchment not wetted. To the top of this tympan is fixed, by a hinge, a slight iron frame, on which paper is pasted, to preserve the sheets from being dirted, and is called

called a frisket. In working this tympan is swiftly turned down upon the sheet, and the sheet with the tympan, &c. are at the same instant turned down upon the letter, which is first made black by beating with the balls, and being rolled under the platten, the impression of the side of the whole sheet is made by two pulls as before, and being instantly drawn back, and the tympan and frisket taken up, the printed sheet is taken off, another clean sheet of paper placed in its room, and printed like the other ; all which is done with so much swiftness that three or four sheets are constantly printed on one side in the short space of a minute, by two men ; one of whom blacks the face of the letter, and the other performs the rest of the work.

The boy, designed to be a Compositor, ought to have a taste for literature ; and if he is well acquainted with the Latin, Greek, and French tongues, it will be greatly to his advantage, both as an apprentice, a journeyman, and a master: but it is absolutely necessary that he should be able to read those languages ; for, by barely reading them, he may make a shift to compose, but not with half so much ease, accuracy, or satisfaction to himself ; and, without he is thoroughly acquainted with the grammar of his native tongue, he can make but a very poor Compositor.

The

The boy, who is designed to be a Press-man, should be strong and active; for his business will be very laborious; some ingenuity is also necessary; as he ought not only to learn to work at press, but to obtain a perfect knowledge of the press, and be able to take it to pieces, set it up again, and rectify it, when any part is out of order. The masters take with an apprentice, who is to be a Compositor, from 20 to 40l. and with a Press-man from 10 to 20l. The profits of each in general are from 14s. to about a guinea a week: But they cannot set up as master, in a genteel way, with less than 7 or 800 l. to buy materials, &c.

Of the PRINTERS INKMAN.

THIS business requires neither ingenuity nor learning. It is said, there are not above two of this trade in London; and these being capable of making Printing-ink to supply the whole nation, they take no apprentices. Printing-ink is made by boiling a vessel of linseed-oil, and setting it on fire till it becomes of a proper thickness; a little rosin is generally put into it when boiling. After it is cold, it is mixed with a sufficient quantity of lamp-black.

Of the PRINTERS JOINER.

THIS business requires great ingenuity, as they perform all the wood work belonging to the Printers; as cases for the compositors, the wood work.

work of the press, slips of wood of the exact depth of every size of letter, brass rules for lines, and, in short, a great variety of things that ought to be made with the utmost truth and exactness. There are but three or four in London, who seldom or never take apprentices.

Of the PRINTERS SMITH.

NO branch of the Smith's business requires such exactness or perfection as this; it therefore requires great ingenuity and skill. The Printer's Smith makes all the steel and iron work belonging to the press, composing sticks for the compositors, and iron frames, or chases, for holding forms of letter. There are not more of these in London than of the Printer's Joiners; but as they perform other work, they take apprentices upon the same terms as those in other branches of the Smithery.

Of the PRINTSELLER.

THE Printfellers are very often Engravers; and when this is the case, the boy who has the proper qualifications for that ingenious art is well qualified to keep a Printshop. But when a youth is to be put apprentice to one who is not an Engraver, it will even then be of the greatest advantage to him to have a taste for the fine arts, and to be well versed in drawing, and in perspective.

During

During his apprenticeship, he should make use of his leisure hours in rendering himself an able designer, and in becoming acquainted both with the works of the most famous Engravers, ancient and modern, and with the celebrated paintings of the great masters. With these advantages he will be able, when he sets up for himself, to copy the most admired works of a Correggio, or a Rubens, or to form elegant designs of his own; and, by getting them engraved, have a constant succession of new Prints, that will not fail, if finely executed, to engage the attention of the public. The Print-sellers take from 20 to 40 guineas with an apprentice; who, when out of his time, will be able to earn a genteel living by the above accomplishments. If he sets up for himself, it will require from 100 to 1000 l. according to the figure he would make in trade.

Of the PROCTOR.

THE youth intended for this profession, ought to have a liberal education, and if he is not possessed of incorruptible integrity, founded upon the solid basis of the amiable principles of virtue and piety, he should not enter upon a station where he will be surrounded with temptations, and where his complying with them may render him a very dangerous member of society. A Proctor is, in the
spi-

spiritual courts, what an Attorney is in common law; and to qualify himself to give the best advice to his clients, he should make himself acquainted with the principal branches of the civil and canon law, and should be versed in the writs and different methods of proceeding in different courts. He should be able to take informations from the clients; to put their suits in motion; to prepare briefs for the counsel with conciseness, and to place the facts in a strong light; and it is his business to conduct the affair till it comes to a final issue. In short, he ought to have money to prevent his being obliged to trouble his client upon every occasion, and such honesty as not to spin out the process to an unnecessary length. With these qualifications, the Proctor will have a much surer and safer way to success, than he could meet with by practising all the base arts of chicanery.

Of the PUBLISHER.

THE Publisher advertises Pamphlets, enters them at the Stamp-office, folds, stitches, and publishes them for such gentlemen as print them at their own expence, and for the booksellers who do not chuse to set their names to them. They also sometimes publish bound books for the booksellers, and some News-papers; they likewise purchase copies, and publish them at their own expence; but they seldom or never take apprentices.

Of

Of the PUMP-MAKER.

THOSE of this business make Pumps and wooden Pipes for the conveyance of water from one place to another. The common Pump consists of a cylinder or pipe, a sucker, and handle; but will not raise water above thirty-two feet. The Pump-maker forms only those of wood bored, for the use of Distillers, Brewers, Shipping, &c. It is hard work, and requires more strength than ingenuity or learning. The masters take from 5 to 10 l. with an apprentice; and the journeymen, who work from six to six, have 12 or 15 s. a week. They may set up master with 50 l. though some employ above 200 l. in the business.

Of the QUILTERS.

Quiling is chiefly performed by the women; but there are some masters, who employ a number of women and girls in making Bed Quilts for the Upholsterers. The women of this business not only make Bed Quilts, but quilted Petticoats, &c. They either take poor girls apprentices, whom they keep for the sake of their work, or have a small sum for learning those grown up, whom they afterwards pay about 10 or 12 s. a week.

Of

Of the RAG-MAN.

MEAN as this business may seem, there are some Rag-men who employ some thousand pounds in it. They buy linen Rags of the Rag-gatherers, &c. and even export them from abroad; these they deposit in warehouses; and, after they are sorted, sell them to the Paper-makers. It is a profitable business; and a person may set up with 100l.

Of the REFINER.

THIS is a distinct branch of trade by itself; for though the Goldsmith ought to refine metals, yet he finds it for his advantage to employ those who make it their sole business. They separate gold and silver from other metals, and reduce them to the proper standard. Some of the Refiners also deal largely in selling gold and silver to the various artists who work up those valuable materials. The Refiners take from 10 to 20l. with an apprentice; who, when out of his time, may earn from half a crown to 3s. 6d. a day; or set up master with 200l. though some employ several thousand pounds in this trade. The principal qualifications in a boy designed for this business are a sound constitution, and particularly good lungs; for the workmen are subject to paralytic disorders, from the effluvia of the mercury used in separating metals; but it is a very profitable business for the master.

Of

Of the RIBBON-WEAVER.

THIS is a pretty light easy trade, and fit for lads of a slender make, or even for girls. The silk for the warp, or long way of the Ribbon, which is generally of the finest kind, is wound round a machine called a warping-frame, and then taken off on a wheel, which is fixed at the end of the loom, and kept at a proper breadth by what is called a fley; which is not very unlike a fine comb, the silk threads going between the teeth. The Weaver then winds a coarser sort of silk on little quills, which are put into the shuttle. When some of the threads that are round the fley are, by means of a treadle, which are long pieces of wood fixed to the tackle of the loom, pulled lower than the rest, and the shuttle put through the vacancy. The Weaver then putting his foot on the other treadle, pulls down those threads that were before uppermost, and returns the shuttle back with his other hand; and this is repeated with astonishing quickness. In this manner all plain weaving is performed; the only difference being in the strength and breadth of the looms, and the labour required to throw the shuttle. A quick hand may earn ten or twelve shillings a week, by making ribbons. They take from 5 to 10*l.* with an apprentice, whose working hours are from six to nine. A very little will set up a master, and honesty and industry

dusttry will hardly fail of increasing his stock, if he is not burthened with a great family.

Of the RIVETTER of SADDLES.

THE Rivetter is a kind of smith, and is employed by the saddler in putting on the iron plates for securing and strengthening the tree, and the stays for the stirrups, &c. This business requires neither ingenuity nor much money. The master takes about 5 l. with an apprentice: the journeymen have poor wages, and a master may set up with 20 l.

Of the ROBE-MAKER.

THE Robe-Maker is a kind of taylor; he makes the canonical habits for the clergy, robes for the lord chancellor, judges, and gentlemen of the law; the furr gowns of the liverymen; riding-habits for the ladies, coronation-robes, the dresses of the different orders of knighthood, and, in short, any dress for the gentlemen, out of the common way of coat, waistcoat, and breeches, except masquerade-habits, which, I think, are made by others. It is a very profitable employ, they having large prices for their work: it is something better for a journeyman than being a common taylor, though not much, unless they can be trusted to cut out. They take with an apprentice from 10 to 20 l. who, when out of his time, may set up with

100l. but it requires a good acquaintance to be able to get custom.

Of the ROPE-MAKER.

ROPEs are made of hemp-yarn, spun in the manner of pack-thread, and then twisted many threads together, sometimes to a prodigious thickness, and smeared over with tar. The lads put to this business ought to be robust and strong, since they will be exposed to the inclemency of the weather, while apprentices. They are taken with very little, or no money. But if they prove good hands, when out of their times, they may get half a crown, or three shillings a day. To set up, will take from 200 to 1000l. This trade requires very little ingenuity, or learning, except writing and arithmetic; which is necessary for the meanest employment, particularly where there is any prospect of becoming master.

Of the SADDLER.

HIS business requires only the common education of a tradesman; but he ought to have a quick invention, a great share of ingenuity and invention, and a considerable stock of ready money. The Saddler furnishes all sorts of Saddles, Housings, Leathern Caps, Holster-cases, Girths, Bridles, Caparisons, &c. and he finishes his work by the help of several distinct tradesmen; as the Tree-maker, who

who makes the wooden part of the Saddle; the Rivetter, who makes the iron work of the Tree; the Founder, who casts Buckles, Bars, Studs, &c. for his Bridles; the Bit-maker; the Bridle-cutter; the Embroiderer, who works Devices, Crests, and Coats of Arms, in gold, silver, or worsteds, upon his Housings. He buys broad cloth from the Woollen Draper, coarse linen from the Linen Draper, velvet from the Mercer, gold and silver orrice and livery-lace from the Laceman, with buckram, silk, and thread, from the Haberdasher. The Saddler takes from 20 to 30 l. with an apprentice; the journeymen, who are commonly hired by the year, are allowed 20 l. per annum, with board and lodging; and a master may set up for 100 l. though, if he gives credit, and has much business, he will soon want eight or ten times that sum. Such as cannot, for want of acquaintance, set up for themselves, commence Piece-workers; that is, take work from the masters to their own houses, and are paid so much for covering or seating a Saddle, or for a Housing, &c.

Of the SAIL-CLOTH WEAVER.

THIS business requires no extraordinary ingenuity, and only a common education. The yarn of which Sail-cloth is made is spun from dressed hemp, much in the same manner as rope yarn, and the house wherein it is spun resembles a small

small rope walk. The Spinners make good bread of it; and women are as much employed as men. As to the weaving, it is performed in the same manner as linen cloth. They take from 5 to 10 l. with an apprentice; who works from six till eight. The journeymen are paid by the yard, according to the fineness of the Sail-cloth; and it requires from 200 l. to 2000 l. to commence masters.

Of the SAIL-MAKER.

THIS is a pretty laborious business; but a lad may be bound about fifteen years of age, without any particular genius or education. The Sail-maker is in every respect the ship's Taylor; for it is his business to sew and shape all the sails. He takes from 5 to 10 l. with an apprentice; who, must work from six till eight. A journeyman may earn twenty shillings a week; but it will require from 500 to 1000 l. to set up master.

Of the SALESMAN.

SAlesmen are those who deal in ready made cloaths for men's wear: They keep large shops, and many of them get handsome fortunes. They, at least several of them, have Taylors in their houses, at so much a week to make what they sell. A lad designed for this employment, should be of an obliging carriage; must be ready at his pen, and understand accounts. The price given with an apprentice

prentice is from 20 to 40*l.* As journeymen they get from 20 to 30*l.* a year and their board; and to set up will take from 300 to 1000*l.*

There is another sort of Salesmen. These sell Sheep or black Cattle at market for the Graziers in the country; and have so much a score for selling them. It is a good employment; but they take no apprentices.

Of the SAW-MAKER.

THIS is a business which requires strength, but no extraordinary education. It is a branch of the Smithery; and the perfection of the work consists in the temper of the metal. The Saw-maker takes from 5 to 10*l.* with an apprentice; who, when out of his time, may earn common Smith's wages as a journeyman; or, with 100 or 200*l.* set up master.

Of the SAWYER.

THE boy, designed for this trade, ought to have great strength of body. The Sawyer saws trees or large pieces of timber into boards; and though it seems a branch of the Carpenter's business, yet it is so distinct from it, that neither a Timber Merchant nor a Carpenter, 'tis said, can employ any but regular bred Sawyers to do that

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work.

work. The Master Sawyer has usually 5 or 10 l. with an apprentice; who must work from six to six. The journeymen, who always work in pairs, commonly earn 3 s. a day each; and a master Sawyer, who can constantly keep three or four pair of Sawyers at work, may live handsomely and save money. Sometimes they fall into the Timber trade.

Of the SCALE-MAKER.

THIS is a business that requires ingenuity and a nice hand. The Scale-makers are partly Smiths, and partly Braziers. They in particular make Steel yards, and the Beams of all kinds of Scales, from those made for the weighing of diamonds, to those for the weighing of hogsheds on the keys; which are no less than fifty different sorts. They also sell all kinds of weights; and keep well furnished shops. They take from 10 to 20 l. with an apprentice; and the pay of a journeyman is from 15 to 20 s. a week. A master for the working part may begin with 100 l. but, if he stocks a shop, he may easily use five times that sum.

Of the SCHOOL-MASTER.

THE boy, designed for this employment, ought not only to be well qualified for the branch of learning in which he is to be educated, but to have

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a natural good temper, a genteel carriage, and the behaviour of a gentleman; more particularly he should himself be free from vice, and be ready upon all occasions to instil the sacred maxims of virtue, decency, and truth, into the minds of his pupils. It is now very common for Writing-masters in particular to take apprentices, with whom they have usually about 10 l. and sometimes 20 l. After they are out of their time, they may easily commence Writing masters; become Ushers to schools or academies, with the salary of 15 or 20 l. a year and their board, or clerks to merchants, or in some of the public offices.

Of the SCOURER.

THE business of the Scourer requires as little genius and education as any other; it consists in scouring men's cloaths, &c. either wet or dry; and is pretty laborious. Those of this business take from 5 to 10 l. with an apprentice; who, when out of his time, may earn, as a journeyman, from 10 to 15 s. a week; and it requires but little to set up master.

Of the SCREEN MAKER.

THE boy, who is designed for this business, would do well to learn to draw, and to obtain some knowledge in perspective, before he goes apprentice.

prentice. There is great variety in this piece of furniture, serving both for ornament and use; and therefore there is some room for a boy of genius to exert his talents. The masters, who are but few in number, generally keep handsome shops; they make their own frames, which they mount with gilt or painted leather, &c. and they sometimes deal also in Cabinet and Chair-maker's goods. They take about 20 l. with an apprentice; and, if they keep a genteel shop, employ several hundred pounds in trade.

Of the SCRIVENER.

THE youth, designed to be of this genteel business, ought to be taught to write very neatly, and in particular to be well versed in the law hands, which will be of great advantage to him when put apprentice. The Scrivener engrosses all writings for the Attornies on paper, vellum, and parchment; and no Attorney in the city can employ his own clerk in engrossing, without paying a valuable consideration to the company of Scriveners for a licence to do it. The Scriveners sometimes also practice the business of a Notary-public; and at other times sell their own Stamps, with Pens, Ink, and Paper; in which last case, they go under the denomination of Writing Stationers. They take from 20 to 50 l. with an apprentice.

Of the SEED-SHOP.

THOSE who keep Seed-shops sell all sorts of Garden and Grass Seeds, Gardeners Tools, Matts, &c. This is a very profitable branch of business: It is in few hands; and requires no more skill than other retail trades. They take from 10 to 20 l. with an apprentice; and their journeymen, as shop-keepers, have from 10 to 20 l. a year with board and lodging. It requires from 100 to 500 l. to set up masters.

Of the SETTERS.

THIS business is unfit for weak lads, as it requires great strength; they being obliged to carry heavy burthens. The Setter takes cloths and other woollen goods wet from the Dyers, and hangs them on tenters to dry, stretch, &c. In short, the Setters are nearly in town what the Fullers are in the country; the scouring excepted. They have from 5 to 10 l. with an apprentice; who, when out of his time, may have 12 s. a week by being a journeyman; or with 100 may commence master; provided he only rents a tenter ground.

Of the SHAGREEN-CASE-MAKER.

THIS art requires ingenuity; but neither much strength, nor any previous education, besides that of any other artist or tradesman. He makes

Shagreen Cases for Watches, Tweezers, &c. and Shagreen Chests for plate. He takes from 10 to 20 l. with an apprentice; who, with 20 l. may set up master; though, if he would keep a stock by him, he will have occasion for 200 l.

Of the SHIP-BUILDER.

THE boy, designed for a Ship-builder, or a Ship-wright, must have a solid judgment and a natural turn of mind for his profession. As one of this profession is an architect with respect to ships, he ought to have a very particular education. He should be well versed in mechanics and geometry; and should early learn to draw. He ought to have a good stock of money to set up with, and great strength of body, that while he is an apprentice he may learn the executive part. When a Ship-builder undertakes to build either a Man of War or a Merchant-man, he first draws a plan of the vessel, and from thence, by the scale and compass, measures every plank and beam laid in her, from her going into the stocks till she is launched. The Ship-builders take from 20 to 50 l. with an apprentice, who ought to be about fifteen years of age; and will require from 500 to 2000 l. to set up master.

Of the SHIP-CARPENTER.

THE boy, who would be completely qualified for this business, ought to have much ingenuity, and to be master of drawing, figures and mensuration, which will enable him to understand the theory as well as practice. The Ship-carpenters are the workmen employed by the Ship-builder: They take from 10 to 20 l. with an apprentice; who, when out of his time, may earn in the dock yards 18 or 20 s. a week, according to the extent of their abilities; and, if he goes to sea, may have from 40 to 50 s. a month.

Of the SHIP-CARVER.

THOSE of this business, as well as all other Carvers, should learn to draw before they are put apprentice. They are never employed in any other branch of that art, but in carving the ornaments of ships. They take from 5 to 10 l. with an apprentice; who, with 50 l. may set up master.

Of the SHIP-CHANDLER.

THOSE of this trade keep shop, and sell Pitch, Tar, Oakum, Tallow, Rosin, and other articles for paying a ship's bottom, and other uses of ships. They take ten or twenty pounds with an apprentice; who, when out of his time, may set up with one or two hundred pounds.

Of the SHIP JOINER.

THOSE of this business differ little from the other Joiners, except in their being employed in wainscoting the cabins of ships, and performing the other work proper to Joiners. They have the same sums with apprentices, and pay the same wages.

Of the SHIP-PAINTER.

THESE Painters are in every respect the same with the House-painters; only their principal business is the painting and gilding of vessels for the sea service. The same abilities are required for the boy who is to be put apprentice to either. They take the same with an apprentice; and the journeymen have the same wages..

Of the SHOE-MAKER.

THIS is a business that requires no very extraordinary abilities, nor any learning, besides reading, writing, and accounts. The master Shoe-makers in London keep shop, and employ many workmen and women; and some of them export great quantities to our plantations, both of Shoes and Boots made in London, and of those they contract for in the country. The principal business of these Shoe-makers, and of their journeymen and apprentices, is cutting out Shoes, delivering them to the makers, receiving them when finished, fitting

ting them on the feet of their customers; and keeping their books; but it is usual, and very necessary for an apprentice before he is out of his time, to spend a month or six weeks in learning to make a shoe. These shop keepers take 10 or 20 l. with an apprentice; who, when out of his time, may have 15 or 20 l. a year and their board, by being a Clicker; for by this name they call their journeymen who work in their shops; or, with 100 l. he may set up a small shop: But some of them employ several thousand pounds in trade; and from small beginnings raise great fortunes.

The men, who really make the Shoes, are considered as journeymen; though they take apprentices. They are divided into two classes; those who make men's Shoes, Boots, &c. and those who makes Shoes only for the women. The journeymen and the women, who bind the Shoes, and sew the quarters together, when they are made of silk, velvet, callimanco, &c. get but small wages. These journeymen take about 5 l. with an apprentice; who, when out of his time, may get about 9 or 10 s. a week; or, if he has a little money, and some acquaintance, he may set up as a chamber-master, and work for his own customers.

Of the SILK-MAN.

THIS is a very genteel and reputable trade; and the Silk-man, being by the nature of his business, obliged to have a capital of some thousand pounds, deserves a place in the first rank of tradesmen. The youth, who is put apprentice to it, ought therefore to have, besides a handsome fortune, the education of a gentleman, at least so far as relates to a polite behaviour; no extraordinary learning is however necessary to qualify him for this branch of trade: He should write a fair expeditious hand, and be well versed in accounts. The Silkman buys raw and spun Silk from the Importer, and sometimes imports it himself; he keeps shop, and sells his Silk by the pound. He takes from 50 to 300 l. with an apprentice; who may set up with 1000 l. tho' if he has much trade, he may soon have occasion for three or four times that sum.

Of the SILK-THROWSTER.

THOSE of this business are employed in twisting and winding Silk, to fit it for the use of different artificers. They take from about 20 to 50 l. with an apprentice; and, as they deal in Silk, require from 400 to 2000 l. to set up masters.

Of the SILK-WEAVER.

THE boy, who is to be put apprentice to a Weaver of Plain Silks, requires no extraordinary abilities; but if he is to be bound to a Weaver of Flowered Silks, as Damasks and Brocades, he ought to learn drawing, that he may be able to design his own patterns. The sums given with an apprentice are from 5 to 10*l.* Some of the masters keep only a loom or two at work; and such a master may set up with 50 or 100*l.* But there are others who are great dealers, and employ from 500 to 5000*l.* in trade. These last require from 20 to 100*l.* with an apprentice; who will be chiefly employed in the compting-house. The wages of Weavers in general are but poor, the best hands among the journeymen being seldom able to get above 15*s.* a week.

Of the SILVER-CASTER.

HIS art does not require any extraordinary genius, strength, or learning. The Silver-caster casts Buckles, Stay-hooks, the Work of Seals, and many other articles for the Jewellers, who afterwards repair and polish the work, and set stones in the apertures left for that purpose. The Silver-caster works in the following manner: He lays upon a table the various patterns from which he is to cast; as the Rims of Buckles, Stay hooks, the Work of Seals, &c. These being placed at a small

distance from each other, he places over them a brass frame, which is called a flask; into this frame he sifts a quantity of fine brick dust over the models, and then fills up the flask with fine wet sand, which being close pressed down, the flask, with the sand on which is impressed the things to be cast, is carefully taken up, dried and smoked. Meanwhile the Rims of the Buckles, Stay-hooks, &c. the impression of which was made as before-mentioned in the sand, are carefully turned, and placed exactly on the same spot on which they lay before; another flask answering to the former, is again placed over them, brick-dust is again sifted in, and the flask, being filled up with wet sand, is dried and smoked like the former. A groove is then made in the sand, leading to the several figures to be cast, from an opening in the brass frame; and the two frames being placed together, the melted silver, gold, or other metal, is poured in, and if it runs well, all the figures are cast in an instant ready to be sent to the Jewellers. Those of this business take 10 or 20 l. with an apprentice; and, as they sell the metal they thus cast, require one or 200 l. to set up master.

Of the SILVER BUCKLE-MAKER.

THE boy designed for this business ought to learn drawing, that he may be able to make his own models for the use of the Caster, and to enable

enable him to raise the work of the Buckles, and improve, and properly polish the figures that come rough and rudely formed to his hand. The men in this business work for the Gold-smiths; and take about 10 or 12 l. with an apprentice; who, when out of his time, may earn about 20 s. a week.

Of the SILVER-SMITH.

TH E S E are now distinguished from the Gold-smiths only by their being the artists who perform the work which the others sell in their shops. The boy, intended for this business, ought to have a good genius, which should be improved by learning to draw, and a solid judgment, together with a mechanical head and hand, to enable him not only to perform his work, but to understand all the properties of metals; the proper menstruums for their solution; and the secret of mixing them with their proper alloy. The Silver-smith is employed in making all manner of Utensils of gold and silver; and his work is performed by soldering and beating vessels into form with the hammer, and polishing. They take with an apprentice from 10 to 40 or 50 l. pay their journeymen, who work by the piece, from 12 to 15 s. a week; and require to become master from 80 to 500 l.

Of the SILVER and GOLD THREAD-SPINNERS.

THE most necessary qualifications in this business, in which both men and women are employed, is a dry hand. The silver or gold wire being drawn to the utmost fineness by the Wire-drawer, and then flattened, it is spun, or, in other words, twisted round a thread of silk. This is done in a long room, at the end of which is a wheel of steel, on which are spindles placed in the same manner as in the wheel of a rope-walk. To one of these spindles is fastened the silk together with the flattened wire; one person turns the wheel, while another holding the thread of silk in one hand, and the flattened silver or gold wire in the other, allows it to wind gently about the silk, as it is turned round by the wheel: In this manner the silk is covered; after which it is rolled upon a bottom, and is now called silver or gold slefy. The persons employed in this work may earn twelve or fourteen shillings a week. The master is paid by the Lace-man, who generally furnishes him with the materials. He takes from 5 to 10*l.* with an apprentice; who, when his time is expired, may set up with 50*l.*

Of the SILVER-TURNER.

THIS is a business which depends on the Goldsmiths; but requires no extraordinary education. The artist turns a variety of vessels and toys in

in gold and silver. He takes with an apprentice from 5 to 20*l.* and, if the youth has 50 or 60*l.* he may, when his time is expired, set up for himself.

Of the SKINNER.

A Youth, who is to be bound apprentice to a Skinner, needs only the capacity necessary for every wholesale tradesman ; and his education may be confined to reading, writing a good hand, expressing himself handsomely in a letter, and the knowledge of the common rules of arithmetic. The Skinner deals in rich Skins and Furs dressed with the hair on, chiefly for lining or ornamenting garments and robes, and also in the Fur itself; which they cause to be cut off, and sell to the Hatters, &c. and some of them are also Furriers. They take from 10 to 50*l.* with an apprentice; who will require from 500 to 2000*l.* to set up for himself.

Of the SLOP-SHOP.

THIS business requires no great skill, ingenuity, or learning, to become master of it; writing a good hand and accounts are all the qualifications necessary for a young man before he is put apprentice. In the Slop-shop are sold all kinds Jackets, Shirts, Trouzers, and other wearing apparel belonging to sailors, ready made. It is a very profitable business. The masters take about 20*l.* with

with an apprentice; who, when out of his time, may have 20 l. a year and his board as a journeyman, for cutting out the cloth, giving it to the workwomen, and attending the other business of the shop. Some of the masters, and particularly those who contract to serve the royal navy, employ several thousand pounds in trade.

Of the SMITH.

WE have given a particular account of the several trades under this denomination, as the Gold-smith, Black-smith, Copper-smith, &c. under the articles Gold-smith, Black-smith, Copper-smith, &c.

Of the SNUFF-SHOP.

THE Snuff-man buys Tobacco from the Tobacconist, or the Importer, and makes it into several sorts of Snuff, by means of Mills; some of which are turned by Horses, and others by water. Some of these Snuff-men are very great dealers: They mostly keep shop, and sell great quantities of Snuff and Tobacco, not only to the retail shops in this city, but send weekly many hundred weights to the chief towns in England. The boy designed for this trade needs only the common education of a tradesman. The masters take from 20 to 40 l. with an apprentice; who, when out of his time, may get to be a shop-man; may have the management

ment of Mills; or be a rider for the master: But, if he has 100 l. and good credit, he may set up for himself; and, with care, industry, and honesty, may encrease his capital, as others have done, to several thousand pounds.

Of the SNUFF-BOX-MAKER.

THE use of Snuff has naturally produced the introduction of Snuff Boxes; which are made not only of all kinds of metal, either plain, chased, or embellished with stones, enamel, shells, &c. but of horn, ivory, coal, and even paper. This has introduced several different trades; in some of which the makers take 10 or 20 l. with an apprentice; and in others not more than 5 l. In some a journeyman cannot earn upwards of 10 or 12 s. a week; and in other branches they may with equal ease earn upwards of 20 s. Again, in some branches, a master may set up with 20 l. and in others it will require near an hundred.

Of the SOLLICITOR in CHANCERY.

THE education of a Solicitor in Chancery should be nearly the same with that of an Attorney at common law; but he is bound to a Solicitor, or to one of the Clerks in Chancery. Indeed every Attorney, sworn of any of the other courts, may practise as a Solicitor; but this is always done in the name of a Solicitor sworn in Chancery, who makes it his sole business to attend that court.

Of

Of the SOAP-BOILER.

HIS is a laborious greasy business, but abundantly profitable; it requires no great share of ingenuity, and no more learning than is necessary for every great trader. Soap is composed of a lixivium or lye made of kelp, that is, the salt of seaweed obtained by burning, or of the white ashes of other vegetables, to which is added a quantity of lime water. When the lye has stood long enough in the vats to extract the salts from the ashes, it is drained off, and put into a boiler, if for hard Soap, with a proportion of tallow, or if for soft Soap, with a quantity of oil; where it is allowed to boil till the tallow or oil is sufficiently incorporated with the lye, and is become of one thick consistence; it is then taken out with ladles, and poured into small barrels; the hard Soap is put into chests, and when cold, taken out, cut into lengths, and laid up to dry.

Soap-boiling is a very profitable business, and requires a great capital; but none ought to be bound to it, who has not a prospect of becoming master. Those of this trade take with an apprentice from 100 to 200 l. and it requires from 2000 to 5000 l. to set up: But there is little room for journeymen; for if the master and one man in the house understands the business, the whole work may be performed by labourers. The wages received by such a foreman depend on the business of the master,

and

and are in proportion to the largeness of his dealings; but the others are only paid as labourers, from 9 to 12 s. a week.

Of the SPECTACLE-MAKER.

GRinding the glass of Spectacles is a branch of the Optician's business; and the rims, &c. are made by other artificers. This however is one of the city companies; but for a farther account of this useful art, we shall refer our readers to the article OPTICIAN.

Of the SPANGLE-MAKER.

THIS business requires very little ingenuity or learning. Spangles and Plate Figures in embroidery are made of gold or silver wire, twisted round, cut off in rings, and flatted upon a polished anvil, with a punch tipped with polished steel. Those who perform this work are employed by the Lace-men; and take about 5 l. with an apprentice; who must work from five till eight: But 5 or 10 l. will enable him to set up for himself.

Of the STARCH-MAKER.

THIS business requires no great ingenuity or learning. Starch is mostly made in the country; but there are several who make prodigious quantities within the bills of mortality. Starch is
made

made of wheat, coarsely ground for that purpose, upon which water is poured, and left to thicken by drawing off the finest part of the grain; which being done, the water is evaporated. This business is chiefly managed by labourers who have from 9 to 15 s. a week; and therefore it is not prudent to put a boy apprentice to it, unless he has a good prospect of becoming master; which will require between 500 and 1000 l.

Of the STATIONER.

THIS term was originally applied solely to the Bookfellers; who, before the use of printing, had their stations or stalls for the selling of manuscripts: But the business of the Stationer is now confined to those who deal in unprinted paper. It requires no great abilities, nor any other education but writing a good hand, and the knowledge of arithmetic. The wholesale Stationers generally deal in nothing but Paper, and either have mills, which they let out to the Paper-makers, whom they keep constantly employed; or contract with Paper-makers for what they want. This Paper they sell by wholesale to the Bookfellers, Authors, Printers, and others.

There are others who join the business of Velum-binder to that of the Stationer, and sell Paper both by wholesale and retail: These also sell all

sorts

Sorts of Shop-books, bound in parchment or vellum, either ruled or unruled; Pocket-books, Copy-books, Memorandum-books, Letter-cases, Pens, Ink, Wafers, Sealing-wax, Ink-glasses, Ink-standishes, Pounce-boxes, with all the apparatus of writing.

The wholesale Stationer takes 50 or 100 guineas with an apprentice; and those only in the retail way about 20*l*. The former give from 20 to 50*l*. a year to a journeyman, besides his board; but the latter seldom keep journeymen: In short, the wholesale Stationer cannot set up with less than 1000*l*. but he who deals only in the retail way, may set up with 50*l*.

Of the STATUARY.

THE Statuary and Sculptor are generally joined together; as the same person cuts figures in relief and forms Statues. The youth designed for this business ought to have a natural genius for these fine arts, which should be cultivated by his being early put to the best masters in drawing; and to improve his taste he should have a liberal education. Among the languages, Italian ought to be his chief study; as he must perfect himself in Italy: For when he has served his time to the most eminent Statuary here, it may be for his advantage to spend two or three years at the academies in Rome

or

or Venice ; and to visit the closets of the curious : But this is now less necessary than it was some years ago ; as we have two or three artists in this way who are an honour to their country : However the youth of true genius will spare no labour to obtain the highest degree of perfection.

The Master Statuary first draws his design upon paper, and from thence forms a model of clay or wax, from whence the workman blocks out the figure in stone or marble ; and the master, or the finest hand in the house, finishes the principal parts of the work, and the inferior workmen the rest. The masters take 100 guineas and upwards with an apprentice ; but there are some who scarcely deserve the name of Statuaries, who take an apprentice with only 10 l. The journeymen are encouraged according to their abilities ; a fine hand being paid from 40 s. to 3 l. a week ; and it will require from 200 to 2000 l. to set up master.

There are Statuaries who cast only in metal ; these have a model of clay, made with all the proportions of the designed figure ; from this model the mould is made, into which they run the metal. The metal figures are not however cast all at once, but in different parts ; the trunk of the body in one part, and the limbs in another ; all which are afterwards soldered together.

Of the STAY-MAKER.

HIS business requires some genius, but no extraordinary education. The boy who is to be put apprentice to a Stay-maker ought however to be naturally polite, to be possessed of a tolerable assurance, an easy address, and the power of keeping secret those defects which it is frequently his business to conceal, by bolstering up a fallen hip, or distorted shoulder. The materials in Stays are tabby, canvass, and whalebone. The Stay maker takes the lady's shape, if it be a fine one, as nicely as he can; and where it is uneven or deformed, endeavours to conceal every defect; he cuts out the tabby and canvass by the shape in quarters, which are given out to be stitched by women, who are able to earn only 5 or 6 s. a week. After this, having prepared the whalebone, he thrusts it between the rows of stitching, which requires a good deal of strength, and is the nicest part of Stay-making. The Stays being boned are loosely sewed together, and fitted on the lady, when, if they answer according to expectation, they are bound, the braiding laid along the seams, the lacing put down the stomacher, and finished so as to be fit for the lady's use. The masters take from 5 to 10 l. with an apprentice; who, when out of his time, will have the common wages of a Taylor, by working as a journeyman; or, if he has 50 or 60 l. he may set up for himself.

Of

Of the STOCKING-FRAME MAKER.

THE boy designed for this business requires no extraordinary learning. It is an ingenious branch of the Smithery ; but the greatest difficulty is in tempering the large springs upon which the work moves, and making the stocking needles, which ought also to be properly tempered. It is very profitable to the master ; who takes about 10l. with an apprentice ; who, when out of his time, may have the common wages of a Smith, by working as a journeyman ; or with somewhat less than 100l. he may set up master.

Of the STOCKING-WEAVER.

HIS is a business that requires some ingenuity ; but no great strength, nor is any education necessary, besides that proper for all tradesmen. The principal things the apprentice has to learn, is to know how to mark a clock, or point on a sheet of point-paper, to represent it properly on the stocking, and to rectify any little disorders that may happen to that curious engine the Stocking-frame. The workmen are paid for every pair of stockings, according to the materials of which they are made, and their degree of fineness. The masters work for the Hosiery ; who commonly furnish the worsted, silk, or thread ; and take from 5 to 10l. with an apprentice, who, when out of his time, if capable of making the best silk or cotton hose, will be able

able to earn from 12 to 18s. a week; out of which he must pay the master 1 s. 6 d. a week for the use of his frame: But if he is only able to make coarse worsted stockings, he will not get with the closest application above 9 or 10 s. a week; out of which he must pay for the use of his frame. However, if a person buys a frame, he may save this deduction from the price of his labour; and if he can purchase a small number of them, which will cost him about 15 l. each, he may employ journeymen, and have all the profits of a master.

Of the STOCKING-TRIMMER and PRESSER.

HIS business requires neither ingenuity, strength, nor learning: He receives the Hose after they are seamed, legs them, and fits them for the shop. He takes from 5 to 10 l. with an apprentice; who, with a little money, may easily set up for himself.

Of the STOVE-GRATE-MAKER.

HIS is a business that requires great ingenuity. The Stove-grate-maker, who is a kind of Smith, makes a great variety of these Grates; some of which are of curious workmanship, polished to great perfection; he also makes all kinds of iron and steel Fenders, neatly polished, Pokers, Fire-shovels, and Tongs: He has the brass work from the Founders, and fixes it on. Those of this trade take from 5 to

10 l. with an apprentice; the journeymen, who are able to perform the most curious work, have extraordinary wages; and the rest are paid as common Smiths. It will require from 50 to 100 l. to set up a young man in this business.

Of the STUCCO-WORKER.

THIS is an ingenious art, that requires taste, and some skill in drawing, with the knowledge of geometry, and particularly of mensuration. Stucco is a particular kind of mortar, composed of stone, lime and sand. Mouldings and other ornaments are formed by laying on this mortar to the height of the designed figures, and then running a mould of wood over them of the shape of the intended decorations. These mouldings are sometimes wrought in the manner of carved work by the hand of the Stucco-worker; and sometimes flowers and scrolls are formed from moulds, and stuck on, as the nature of the work requires; which are afterwards improved and imbellished by the artist. This art is now carried to great perfection. The masters take from 10 to 20 l. with an apprentice; who, when out of his time, will be able to earn from three shillings to a crown a day, or with 50 l. may set up master; though some employ 500 l. in trade.

Of

Of the STUFF-SHOP.

THE boy, who is to be put apprentice to a person who keeps one of these shops, needs no other abilities, nor any other education, than that necessary for every other retail tradesman. These shop-keepers sell all sorts of stuffs, whether for men or womens wear; Alapines, Shaloons, Callimancos, &c. There are many of them wholesale dealers; who join to this trade that of being Norwich Factors: But the greatest number are retail traders, who differ from the Mercers, in dealing only in stuffs, as the others deal solely in silks. The wholesale dealers take from 50 to 200 l. with an apprentice; give a journeyman 20 or 30 l. a year and his board; and require 1000 l. to set up as master. On the other hand, the retail traders take about 20 or 30 l. with an apprentice; who, when out of his time, may have much the same wages as those given by a wholesale dealer; or may stock a shop with about 300 l.

Of the SUGAR BAKER.

NO other qualifications are necessary for a young man to be put apprentice to a Sugar-baker, but his writing a good hand, understanding book-keeping, and having a considerable fortune, to enable him to set up for himself when his time is expired. During his apprenticeship he will have

little else to do besides giving attendance and book-keeping, labouring-men doing the dirty and slavish work, of which there is a great deal in this reputable business: However, one bred to the trade, has the inspection of these labourers: This person, who is called the Boiler, has from 50 to 100l. a year. The masters take from 100 to 400l. with an apprentice; and it will require from 1000 to 5000l. to set up.

Of the SURGEON.

THE genius and natural abilities proper to form an excellent Surgeon, differ but little from those required in a Physician. The youth, designed for this second and more certain branch of the noble art of healing, ought to have a sound judgment, a quick apprehension, and a good memory. He should have a determined and resolute mind, a steady and light hand, strength of body, and a tender and compassionate heart: Qualifications that seldom meet in the same person. His education ought to be liberal; in particular, he should not only be a speculative, but a practical anatomist; he should visit our hospitals with the greatest care; and not only attend every operation of importance, but observe and take minutes of the preparatory steps, and of those taken in the progress of the cure: The experience he thus gains he should

should improve by travelling and visiting other hospitals.

There are two methods of educating a Surgeon, one is, giving the youth an university education, then sending him to hear anatomical lectures, and to attend some of the most noted hospitals for a season or two; after which he visits Paris, and returns home a Surgeon: But the second method is the most common; which is, after the youth has learnt Latin and some Greek, he is bound to a Surgeon of good practice for seven years; at the expiration of which he turns out a Surgeon; but both these methods are defective; However, this last method, together with the study of anatomy, and the visiting of foreign hospitals; not as an idle spectator, but as one determined to seize every opportunity of improvement, is the most effectual means of becoming a good Surgeon. The ingenious and the humane young gentleman will reason deliberately on all the various methods of practice, and will discover which will give least pain to the patient, and most speedily produce a cure: He will rejoice more at having it in his power to save a limb, than at his being able to cut it off with the greatest dexterity; and no prospect of lengthening his bill, or bringing more money into his pocket, will induce him to have recourse to amputation, when he can heal without it. This honour, justice, religion, and

every principle of humanity require ; and this will in the end be the surest means of obtaining at once inward satisfaction, and all the external blessings of wealth. The sums given with an apprentice are from twenty guineas to an hundred : But though it requires no great sum to buy a set of instruments, &c. yet the youth should have a fortune sufficient to support him like a gentleman, till he becomes known, and renders his merit conspicuous ; and he may hasten this knowledge by freely and generously giving relief to those who are unable to pay him.

Of the SURGEON'S INSTRUMENT-MAKER.

THE boy, who desires to be of this business should be ingenious ; but is under no necessity of having any more than the common education of a tradesman. The Surgeon's Instrument-makers keep shop, and employ their journeymen and apprentices in making various kinds of Knives, Scissors, Lancets, Saws, Trepanns, Probes, Bistouris, Spatulas, &c. They take from 5 to 20 l. with an apprentice ; and a journeyman, who is esteemed a good hand either in forging or finishing these curious instruments, may earn 15 or 20 s. a week ; or with 100 l. may set up in this business, which is very profitable to a master. Many of this trade also sell all sorts of Cutlery goods.

Of the SWEEP-WASHER.

THOSE of this business, which is a very profitable one, purchase the Sweepings of all the workers in gold and silver, and also refiner's ashes. These ashes, or dust, are well washed from their impurities; then put in a vessel into which quicksilver is poured, and by constantly stirring it about, the mercury attracts whatever metal is in the dust: When they fancy the quicksilver has done its office, it is taken out and washed, and then distilled from the other metals which are left at the bottom, and being melted together into a lump, are carried to the refiner's, who knows how to separate them. There are but few masters in this way; and those take no apprentices, but use labourers to do their work. A master may set up with 50 l.

Of the SWORD-CUTLER.

THE profits arising from this business are very considerable to the master; but it requires no extraordinary judgment, nor any uncommon learning or bodily strength, in the youth who is to be put apprentice to it. The Sword cutler frequently deals in the goods sold by the common Cutler; but he is here to be considered as only concerned in mounting swords, making scabbards, &c. The blades are not always made by the Sword-cutler; for those called by this name frequently do no

more than mount them. The handles, if of plate, are made by a class of Silver-smiths who make nothing else; and, if of brass, by the Founder. The Sword-cutler has some relation to the Smith, as he uses the file and the hammer in putting on his hilts; and to the Shoe-maker, as he uses the awl in finishing the scabbards. Those of this business keep shop; and take about 20*l.* with an apprentice; who, when out of his time, may earn about 1*5s.* a week; or, with about 200*l.* may set up for himself.

Of the TALLOW-CHANDLER.

THIS is a very necessary and profitable business. The youth designed for it ought to have an healthy and strong constitution; but no previous education is necessary more than writing and accounts, and the meanest genius is sufficient. The Tallow-chandler takes from 10 to 20*l.* with an apprentice; who, as a journeyman, may get 12 or 14*s.* week; or may set up in a middling way with 200*l.*

Of the TANNER.

THIS business is laborious and dirty: It requires strong healthy lads, as they will be much exposed to the weather, and be very frequently in the wet. Tanning is performed in this manner: The hides are first put in a pit with quick lime, which soon strips them of the hair; they are then washed
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and scraped to prepare them for the bark pit; the leather is then put into another pit filled with bark, which is stripped off the oak in summer, and dried in the sun; it is ground in a mill, and mixed with water. The hides stay in this pit till the bark has penetrated quite through the leather; and the workmen cut it to see if the operation is completed. This trade requires neither genius nor learning; reading, writing, and some knowledge of figures, are all that is necessary. The masters take with an apprentice from 5 to 10 l. who, as a journeyman, will get little more than the common labourer, except employed in the management of the business by a master who will not apply to it himself; or does not understand it; and it will require at least 500 l. to set up with any tolerable probability of success.

Of the TASSEL-MAKERS.

THESE are more frequently women than men. They make Tassels for pulpit cushions, window-curtain cords, and for a variety of other uses. These Tassels are made of gold or silver thread, silk, mohair, or worsted, worked over a mould. When Tassels were worn by the ladies to their manteels, this was an exceeding good employment, and many families got a genteel maintenance by it; but now, I believe, it is hardly worth learning. The makers take girls out of the schools

and parish children with little or no money ; who, if good hands, may, when out of their time, be able to get six or eight shillings a week as journey-women ; or may set up with a very little ; all materials being found by the Lace or Worsted-men, their employers.

Of the TAYLOR.

THIS is a trade too well known to need a particular description. Though custom has rendered the Taylor contemptible among the vulgar ; yet to many who think themselves very pretty gentlemen, he is a man of vast importance ; since to him, their Barber, and Dancing-master, they owe the high advantage of being acceptable to the ladies, who are too frequently fond of the mere outside, and prefer a fool decked out in lace and embroidery to the man of sense in a plain habit. The lad intended for this business should have good eyes, a tolerable genteel person, and a good behaviour, as his success in trade will a good deal depend on these ; for an awkward taylor will not be acceptable to the fine gentlemen, who make dress a matter of vast concern ; and these are perhaps the Taylor's best customers : But as to learning, very little is necessary, more than writing and accounts. The Taylors take with an apprentice from 10 to 30*l*. their working hours are from six to eight ; but in cases of public mourning, or other extraordinary

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occasions, they work all night and on Sundays. As journeymen they get in general 15 s. a week when employed ; but are often out of business in winter, except they are uncommon good hands. 2 or 300 l. will set up one in a middling way ; though some at the court end of the town employ as many thousands.

Of the TEA-MEN.

TH E S E traders deal very largely in the article Tea ; and frequently, if not always, sell Coffee, Chocolate, and Loaf Sugar. It is a very genteel good business, and not so dirty as the Grocer. They take with apprentices from 20 to 50 l. give about 20 l. a year and their board to journeymen ; who cannot commence master with less than 300 l. and may employ 1000 l. in trade.

Of the THREAD MEN.

TH E S E traders generally keep large shops, and are reckoned genteel tradesmen. Many of the articles they deal in are imported from abroad, especially those of the finer sorts ; a great deal of which are brought from Holland ; some also comes from Scotland some from Ireland ; and very little, and that principally coarse coloured thread, is made in England. This, like all trades that have nothing in them, but only buying at one price, and selling at another, requires little ge-

nus or learning. The Thread-man takes with an apprentice from 20 to 50 l. who, when out of his time, will be able to get 20 or 25 l. a year and his board as a journeyman; but cannot set up genteely as a master for less than 500 or 1000 l.

Of the TIMBER-MERCHANT.

THE Timber merchant imports his Timber, from the various parts of the world where it is produced, as Deal from Norway, Wainscot from Sweden, Mahogany from Jamaica, &c. These goods are sometimes brought him in his own ships, sometimes in those belonging to others; and he returns specie, or such English manufactures as the ferent countries are in want of. The youth intended to be put to this business should be extreamly well versed in arithmetic, or he will be unfit for his master's compting house; and it is there the principal part of his time must be spent: For he may as properly be called a clerk as an apprentice. Few other qualifications are necessary. The Timber-merchants take with their apprentices from 50 to 200 l. who must all their life time be clerks, except they have a very genteel fortune to set up with; for they are not only obliged to have a very large stock of Timber in their yards, but must also give very considerable credit to Carpenters and Master Builders. Some employ in this trade eight or ten thousand pounds, and perhaps a less sum than

two or three is not sufficient to give a probability of success: But I should add, that all who keep Timber yards are not Merchants; for many Carpenters buy in large quantities from the Importer and sell again to their Brother Carpenters.

The TIN-MAN, or TIN-PLATE-WORKER.

TIN is a composition of Iron and Block Tin; but they are not mixed together by melting; but Iron Bars are covered over with Block Tin, and then flatted in a flatting mill to the thinness fit for use. Formerly these Tin Plates used to be imported from Sweden, but now we have most of them from Wales. The Tin man receives them in sheets; he beats them on a polished anvil to give them smoothness and lustre; he then forms them into a variety of different utensils; such as Kettles, Milk-pails, Sauce-pans, Drinking-pots, Candle-sticks, Canisters, Flower-boxes, &c. He also makes the frame work or mounting of Lanthorns and Lamps of Tin, and fixes in the horn or glass. This was formerly reckoned a mean employment; but now the Tin-men are become considerable traders, keep large handsome shops, and export great quantities of the goods they deal in. Many of them sell Lamp Oil, and contract with parishes or gentlemen for lighting their Lamps by the year. The take with an apprentice from 10 to 20 l. who will be able, as a journeyman, to get about 12 or

14s. a week by working from six till nine; or may set up master, in a low way, with 100 l. or handsomely with 500 l.

Of the TIRE-SMITH.

HIS is an ingenious branch of the Smith's business, consisting in making the Iron Work belonging to the carriages of coaches, chariots, chaises, &c. The nicest and most curious parts of their work are Springs for spring-coaches, and other vehicles of pleasure. There is great variety in this business. The masters take from 5 to 10 l. with an apprentice; who, if a good hand, will be able to earn upwards of 20 s. a week as a journeyman; and 100 l. will enable him to set up for himself.

Of the TIRE-WOMAN.

THIRTY years ago this business gave many women in London genteel bread; but now the ladies cannot be dressed with elegance, except a French Barber, or one who passes for such, by speaking broken English, adjusts and curls their hair at the exorbitant price of a crown or half a guinea a time. Our grandmothers thought it bordered on immodesty to appear with their heads uncovered; but probably our grand children, despising such narrow prejudices, may not be ashamed of going naked from the waist upwards, or of having
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men chamberlains or dressers. I believe the few women, who now cut hair, cannot live by the employment, and therefore need say nothing of the terms on which they teach others.

Of the TOBACCONIST.

THE importation of Tobacco brings in a vast revenue for the support of government, and the traders in it are frequently very considerable Merchants. Many deal only in Tobacco, and others also sell Snuff. The Tobacconist is a very profitable and reputable business. They employ labourers to cut it with an engine, and women commonly strip it from the stalk. The apprentices are generally taken as in other shop-keeping businesses, only to learn to buy and sell, and to know the different properties and value of the goods they deal in; except among the meaner sort of masters, who make their lads, whom they take with little or nothing, save them the wages of labourers. Masters of any repute will not take a youth with less than 50 or 100 l. who, as a journeyman, may get 25 or 30 l. a year and his board; or may set up with 1000 l.

Of the TOBACCO-PIPE-MAKER.

THIS business requires neither ingenuity nor strength, and as little learning as any other. Pipes are made of white clay, worked very fine,
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and formed into the shape we see them; the hollow is made by running up a wire; the pipe is then dried, and baked in a furnace. The masters receive 5 l. with an apprentice, and sometimes take poor boys gratis. A journeyman earns 10 or 12s. a week; and 20 or 30 l. will set up a master.

Of the TOY-MAN.

THE boy designed for this trade ought to have good eyes and a very elegant taste, which he should improve by learning to draw with great perfection. Good eyes are necessary to prevent his being imposed upon in buying false stones made of paste; and drawing, to enable him to judge of and improve the curious works made by those he employs. We are here speaking of those shop-keepers, under this denomination, who not only sell all sorts of Toys made for the diversion of children, but a great variety of ornamental curiosities; as gold Snuff-boxes, finely adorned with precious stones, paintings, or shells, with services of chased Plate, diamond and paste Ear-rings, Buckles, Buttons, and Studs, ornamental china, &c. and a vast variety of curious Trinkets. Those in this grand way of business take from 50 to 100 guineas with an apprentice; but they seldom take any. To set up master will require from 1000 to 5000 l. On the other hand, a Toy-man, who deals chiefly in children's Toys, and less expensive ornaments, will take

take an apprentice with 20l. who, when his time is expired, may set up with 200l.

Of the TOY-MAKER.

MOST of the children's Toys being exported very cheap from Holland, and the valuable ornaments sold by the Toyman being finished by the best artists among the Jewellers, Chasers, &c. the making of Toys is confined to a number of ordinary sorts made by poor people, who are so miserably paid for their labour, that they can scarcely support their families. They generally live in very mean lodgings, are frequently obliged to hawk their goods from shop to shop, and seldom or never take apprentices.

Of the TREE-MAKER.

HIS art requires neither any extraordinary abilities nor learning, and no more strength than a Joiner. The Tree-maker forms the wooden part of saddles, and much of the easy sitting of the saddle, with respect to the horse, depends on him; for gentlemens saddles he usually takes the measure of the horse's back, and by that means fits him exactly. Those of this business are employed by the Saddler; and there are not any extraordinary profits to be made of it, either by the master or the journeyman: However, the materials used by the master are not costly; and he has the advantage of giving

giving little credit. He takes from 5 to 10 l. with an apprentice; who, when his time is expired, may set up with 20 l.

Of the TRIPE-SHOP.

THIS is a very nasty sloppy business. Those, who keep these shops, cleanse and wash the intrails of beasts from all their filth, boil them, and then expose them to sale. They do not usually take apprentices; but when they do, they commonly take poor girls with little or no money.

Of the TRUNK-MAKER.

THIS noisy trade requires a moderate degree of strength, but little genius, and no more learning than is necessary for every other tradesman. The Trunk-maker is a shop-keeper as well as a handicraft; in whose business there is really a greater variety than one would at first imagine; besides many different sorts of Trunks, Portmanteaus, &c. they generally make Leather Buckets. There are but few of this trade; and their profits are very considerable. They take from 5 to 10 l. with an apprentice; who, when out of his time, may earn from 12 to 15 s. a week; or, with 200 l. may set up master.

Of

Of the TRUSS-MAKER.

HE requires some knowledge of the human body, and in the nature of those diseases, in which it is his business to afford relief. He makes Trusses of linen, and covers those which according to his direction are made of steel. He employs Smiths in making irons for the relief of the lame and the crooked; and causes artificial legs, hands, and glass eyes to be made; in all which he deals, as well as in other things of the like nature. There are not many of this business; and most of these keep shop. It is very profitable; but they take no apprentices.

Of the TURNER.

THE trade of a working Turner is very fit for lads of a slight make, as the work is ingenious and not very laborious, being performed by means of a wheel and a lath. The different branches of this business are distinguished by the names of the materials they work in; as the Ivory Turner, the Silver Turner, the Turner of Wood, &c. Some of them keep shops to sell retail what they make or turn; but they mostly work for the shops of others. They take with an apprentice from 5 to 15 l. who, if good workmen, will afterwards be able to get 18 or 20 s. a week; or may set up with 100 l.

There

There are also shop-keepers called Turners, though they do not themselves make one article in the Turner's way. These sell almost every thing that is turned in wood ; Baskets, Mops, Brooms, Washing-tubs, Floor-cloths, Matting, Brushes of all kinds, and abundance of other articles. They take with apprentices from 20 to 30 l. who, as journeymen, will not be able to get more than 20 or 25 l. per annum and their board ; and may set up with 2 or 300 l.

Of the VELLUM and PARCHMENT-MAKER:

THE boy designed for this business will have occasion for neither much strength, ingenuity, nor learning. Vellum is made of calf skin extended and drawn to a proper thinness when green, and Parchment is made of sheep skins in the same manner. There are but few if any of this trade in London. They take from 5 to 10 l. with an apprentice, who may set up with 10 or 20 l.

Of the VINEGAR MAKERS.

THESE, on account of the greatness of their dealings, are frequently distinguished by the name of Vinegar Merchants. It is therefore a business that is only fit for youths of fortune ; who, during their apprenticeship, have little else to do but to sit in the office and perform the business of a clerk ;

clerk ; all the laborious part of the business being performed by labourers. The master, or an overseer, is sufficient to manage the works : There can then be no room for the employment of many journeymen ; and indeed the number of the masters is very small.

Of the VINTNER.

A Lad, who is to serve his time to a Vintner, should be sharp, sober, quick of apprehension, nimble, active, and complaisant ; as to his education, he needs only the common qualifications of reading, writing, and arithmetic. The Vintner, if he deals honestly, buys wine neat as imported, and his profits arise from the difference between buying and selling : But too many of them dabble in the business of the Wine-cooper, and re-brew in the cellar, what had before been brewed in the wine-vaults. The Vintners usually take with an apprentice about 20 l. who, during this time of servitude, may obtain considerable profits from the liberality of his masters customers. He may afterwards become a Drawer or Waiter. Some of these receive wages, and others do not ; but then it is supposed that their veils make an handsome equivalent. It will require 500 l. to set up master.

Of

Of the UNDERTAKER.

THIS business requires no great genius, and only a common education. No other qualifications are necessary, besides the power of a steady melancholy countenance at command. Their business is to watch the approaches of death, and to furnish out the funeral solemnity with all the pomp and feigned sorrow which the heirs of the deceased chuse to purchase, in order to shew their respect or their vanity. Those of this business do not take apprentices as Undertakers; for they are generally also Coffin-makers, common Carpenters, Upholsterers, or Herald Painters. They employ as journeymen people of a solemn countenance, whom they pay at so much a job.

Of the UPHOLSTERER, or UPHOLDER.

THE boy, who is disposed to be of this business, requires no very extraordinary genius, nor any uncommon education. The Upholsterer makes beds with all their furniture, as the Valence, Tester, &c. though all the wood work is performed by the Bedstead-maker, Carver, &c. They stuff and cover Easy Chairs and Settee Beds, and make all kinds of Curtains both for Beds and Windows. They keep large shops; in which they sell Beds, Blankets, Quilts, Counterpains; and some of them deal in all kinds of Furniture, which they
buy

buy of the Cabinet-makers, Chair-makers, &c. They take from 20 to 50 l. with an apprentice; who, when out of his time, will be able to get 12 or 15 s. a week. They employ women, who earn a shilling or eighteen pence a day; and an apprentice requires from 100 to 1000 l. to set up master.

Of the WARE-HOUSE-MEN.

UNDER this denomination are comprehended several branches of tradesmen, who have a particular species of goods brought from the county or counties where they are made, and deposited in warehouses, whence they sell them either by wholesale to foreign merchants, or to the retail traders of this metropolis. The principal of these are the dealers in Manchester goods, the dealers in Blankets, Rugs, &c. They are distinguished by the name of the place where the goods are manufactured, or by that of their commodities. The Manchester Warehouse-man takes from one to three or four hundred pounds with an apprentice; who, when out of his time, may have from 20 to 50 l. a year and his board; or, if he has 1000 l. may set up master.

Of the WATCH-MAKER.

THIS ingenious art requires no great strength; but the boy who desires to excel in it ought to have a good genius, and some knowledge of mechanics.

chanics. He should also be endued with patience, have good eyes, and a steady hand. When Watches were first invented, they were begun and ended by one man, who was called the Watch-maker; but now the several parts of a watch are divided among different artists, each of whom performs his part; while the business of the Watch-maker, or Watch-finisher, is to set them to work, to take each part from the artificer, to finish, polish, join them together, and regulate their motion. The Watch-maker has his name engraved upon the plate. He should be a judge of the goodness of the work, as performed by the several branches, and finished by one of his own journeymen, and should put his name to nothing but what will do justice to his character; for the price of a watch greatly depends on the reputation of the maker. As both the masters who keep shop, and the journeymen they employ, take apprentices, very different sums are given with boys to this business: For some will take 10 l. with an apprentice, while others will not take less than 50 l. When a youth is out of his time, he ought to have 15 or 20 l. to buy tools, to enable him to work for the masters; and with these he may earn, according to the goodness of his hand, and his expedition, from 12 to 40 s. a week. It will require a good acquaintance, and from 50 to 1000 l. to set up master.

The

The several trades dependant on the Watch-maker or Finisher, are, on the inside, the Movement-maker, the Motion-maker, the Slide-maker, the Spring-maker, the Chain-maker, and the Gilder; and, on the outside, the Case-maker, the Springer and Liner, the Pendant-maker, and the Key-maker.

Of the WATCH-CASE-MAKER.

THIS business requires no extraordinary education, nor any uncommon abilities. Gold chased Watches are finished by the Watch-chaser, and those set with precious stones by the Jeweller. The Case-maker takes from 10 to 20 l. with an apprentice; who, when out of his time, may earn from 15 to 25 s. a week; or, with about 100 l. may set up for himself.

Of the WATCH CHAIN-MAKER.

THE only qualifications, necessary for this seemingly curious art, are a nice hand and good eyes. The links of these chains are easily made by an engine used for that purpose; after which they are rivetted together. In this business women are employed as well as men. They take about 10 l. with an apprentice; and about the same sum will enable a young man to set up for himself.

Of the WATCH-KEY-MAKER.

INsignificant and trifling as the Key of a Watch is, yet this is made by an artist who has no other employment. He takes from 5 to 10l. with an apprentice; who, with about 20l. may set up for himself.

Of the WATCH-MOTION-MAKER.

THE Motion of a Watch comprehends the false plate, the dial, the dial wheels, the two pinions, and the hands; and it is the business of the Motion-maker to make these several articles. This business is however frequently subdivided into several branches; some performing only one part of the Motion, and some another. The Motion-maker usually takes about 10l. with an apprentice; and, when the youth is out of his time, about the same sum will enable him to set up for himself. The boy, who is to learn all the several branches of this business, ought to have good eyes, a light hand, and to be naturally ingenious.

Of the WATCH-MOVEMENT-MAKER.

THE Movement of a Watch is the main inside work, and includes the wheels, the pinions, the barrel which contains the spring, the fusee round which the chain is wound, and the potence, in which is set the lower pivot of the balance, the other bearing on the cock. This is an ingenious branch

branch of the business; and the youth who is put apprentice to it ought to be well skilled in mechanics; by which he will not only be enabled to proceed with greater pleasure and success, but will easily accomplish all kinds of Clock-work. An ingenious man of this business some years ago made a great improvement in facilitating his work, by the invention of an engine for cutting the teeth in the wheels, which were before entirely cut by the hand; by which the expence of time and workmanship have been greatly reduced. The businesses of the Motion and Movement-maker are sometimes subdivided into several branches; in which some perform only one part of the Movement, and others another. But these subdivisions ought to be greatly discouraged; for a boy, put apprentice to a person who performs only one of these subdivisions, is in much greater danger of standing still, when out of his time, than if he had learnt from a master who had taught him every part he might justly expect to learn. The Movement-maker takes about 10l. with an apprentice; who, when out of his time, may earn about 20s. a week, by working by the piece; or, with from 20 to 50 l. he may set up master.

Of the WATCH-SLIDE-MAKER.

THE Slide regulates the spring, and thereby quickens or retards the motion of all the parts of the watch: But the making of it requires no ex-

traordinary abilities or learning. The master takes from 5 to 10l. with an apprentice; who, when out of his time, may earn about 15 s. a week; or with about 10l. set up master.

Of the WATCH-PENDANT-MAKER.

THE Pendant fastens the spring or chain to the watch; and the making it is performed by a separate artist, who does not require any extraordinary abilities or learning. He takes from 5 to 10l. with an apprentice; who, when out of his time, will be able to earn 15 s. a week and upwards.

Of the WATCH-SPRINGER and LINER.

THIS business requires no very uncommon abilities or learning; and is very often performed by women. It is entirely confined to the cases, which he polishes, springs, and lines. The Springer and Liner takes about 5l. with an apprentice; who when his time is expired, may set up with about 10l. and earn from 15 to 25 s. a week.

Of the WATCH-SPRING-MAKER.

THE maker of the Spring, which puts all the parts of the Watch in motion, has no occasion for any extraordinary abilities; the principal part of the art consisting in well tempering the steel. He takes

takes from 5 to 10l. with an apprentice; who with about 50l. may commence master.

There are artificers who make only the caps and studs for Watches; others who make shagreen and tortoiseshell cases, and stud them with silver or gold, &c. These and some other artists take from 5 to 20l. with an apprentice; who, when out of his time is paid according to the neatness of his workmanship.

Of the WATERMAN.

THE boy designed for this business should have great strength and a robust constitution. The Watermen ply in small boats on the Thames. It is a laborious business; and they take about 5l. with an apprentice, who ought to be at least fourteen before he is bound. If when out of his time, he can purchase a boat, which will cost about 15l. he may earn from a guinea to 30s. a week.

Of the WAX-CHANDLER.

THIS is one of those businesses that require no particular genius or education. Wax Candles are neither cast in moulds nor dipped, but rolled and drawn. The Wax-chandler also makes Flambeaus, Sealing-Wax, Wafers, &c. His trade is very profitable. He takes from 10 to 15l. with an apprentice; who, when out of his time, may

get from 12 to 15s. a week; or, with 100l. may set up for himself: But, if he gives much credit, he will want five times that sum.

Of the WAX FIGURE-MAKER.

THIS business, as it is commonly managed, does not require any extraordinary genius. In bustoes the impression of the face is taken off in talk, and the concave is afterwards filled with wax. Other figures in wax are made in moulds; and after the figures are thus cast they are painted. The youth, who would excel in this business, should be very expert in drawing and designing. His friends must give 10 or 20l. with him in order to his being an apprentice; and it will require from 50 to 200l. to enable him to set up master.

Of the WEAVERS.

THEIRS is an extensive business divided into many separate branches, which all together form the principal articles of trade and the staple commodities of these kingdoms. Some of these are carried on in Scotland and Ireland, and others in the different counties in England. The Silk Manufacture is almost the only branch carried on in London; and this is divided into almost as many branches as there are different kinds of silk. Indeed the Spittlefields Weavers, who are all employed in
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the Silk Manufacture, are a numerous body. The plain Silk Weaver requires but little ingenuity; but the Weavers of plain Velvets, and more particularly those that are figured, together with the Weavers of flowered Silks, Damasks, and Brocades, are very ingenious artists, and ought to learn drawing, to enable them to design their own patterns. Indeed our pattern-drawers in this branch of business have arrived to a great degree of perfection, and now much exceed the French in the beauty of their designs and the elegance of the execution; so that nothing, but a very criminal partiality in favour of the French, can induce our nobility and gentry to furnish themselves with these articles of commerce from our neighbours. See the articles *Livery-lace-Weaver, Ribbon-Weaver, Silk Weaver, &c.*

Of the WHALE-BONE-MERCHANT.

THERE are but few of this business. They buy the Whale-fin, or Whale-bone, chiefly of the Dutch, and of the English merchants engaged in the Whale-bone Fishery. These fins are prepared for the shops, by being boiled in a very large copper; when, being taken out while hot, they are cut into pieces, and split by being put into a vice, where the workman follows the grain of the fin with the knife. The Whale-bone merchant, however, only buys the Whale-bone, deposits it in his shop, or warehouse, and sells it in pieces, by

wholesale or retail. It is a business that requires neither learning nor ingenuity; and no other qualification is necessary, but writing and the knowledge of accounts. The Whale-bone merchants are great dealers. They take from 50 to 2 or 300 l. with an apprentice; who, when out of his time, will require from 500 to 2000 l. to set up master. They give a journeyman from 20 to 50 l. a year and his board.

Of the WHEEL-WRIGHT.

THOSE of this business make both the bodies and wheels of carts and drays; but have nothing to do with coach-wheels. It is a laborious business that requires a good deal of strength. The Wheelwright takes about 10 l. with an apprentice; who, generally works from six till nine. He gives 15 or 18 s. a week to a journeyman; who, will require about 200 l. to enable him to set up for himself.

Of the WHIP-MAKER.

IT requires some little ingenuity to be a complete master of this business. Whips are made with a wooden handle and whalebone covered with cat-gut; and the small round plate at the top is furnished by the Sadler's Founder. The masters in a small way, who work only for the Saddlers, and wholesale tradesmen, take 5 l. with an apprentice; but the more considerable dealers will not take less than

than 20l. A journeyman may earn from 10 to 18s. a week; and it will require 500l. and upwards to stock a shop or warehouse.

Of the WINE-COOPER.

THE boy designed for the business of a Wine-Cooper, ought to have a very nice and delicate palate, that he may distinguish, with great exactness, the peculiar properties and flavours of Wine; but he needs only the common education of a tradesman. The Wine-Cooper in London is a wholesale and retail dealer in Wine; and receives the name of Cooper, from his taking care of the casks as well as the liquor they contain. He mixes Wines of different growth, to answer the flavour and taste of his customers; he fixes them down, purges them from their lees, and renders them fit for drinking; he recovers them when they are pricked; preserves them when on the fret; and revives their colour and flavour when lost by age or any accident. This is the honest part of the business; but there are some of this trade, who not contented with compounding Wine, and removing its defects, convert Cyder, mixed with Sloes, Molasses and other material, into the resemblance of Mountain, Port, Canary, and other products of the Vine; and are become so expert at deceiving the palate, that few can distinguish the true juice of the grape, from the sophisticated liquor brewed by the Wine-

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Cooper. However, some of them import great quantities of Wine; and these last generally assume the name of Wine-Merchants. Those of this business take from about 25 to 200l. with an apprentice; who, when out of his time, may have a guinea a week besides his perquisites, which are very large; and it will require from about 500 to 5000l. to set up master.

Of the WINE-MERCHANT.

THE youth, designed for this business, ought to be so well acquainted with the languages of France, Spain and Portugal, as to be able to carry on a correspondence by letter in those countries. During his clerkship, he should obtain a sufficient knowledge of what English commodities are most wanted there, as well as of the course of exchange at the several ports. The Wine-Merchants import great quantities of Wine, which they chiefly sell to the Vintners. They take from 100 to 300l. with a clerk; who may afterwards have 50l. a year salary, or set up with 2000l.

Of the WOOD-CUTTER.

THERE are several branches of this business; some working for the Calico Printers, others for the Printers of Books, and others for the Makers of Hanging-paper. The boy, who is to be put apprentice to any of these branches, which are all
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formed on the same principles, should learn to draw. They none of them require any great strength; but those who work for the Printers of Books ought to have the neatest hand. There are however not above two or three of this business in London; and but one of any reputation for skill: Those who work for the Letter-press Printers, therefore seldom or never take apprentices. It is proper to observe, that all Wooden Cuts are directly opposite to engraving on copper, and that they are made by cutting away every thing that is not to appear in the impression; while in copper plates nothing appears but the strokes of the graver, &c. and what is not cut away makes no impression. In those branches where the artists take apprentices they have about 10 l. with one of them. After the boy's time is expired he may set up for himself with 5 l. and, if he is a good hand, may earn four shillings or a crown a day.

Of the WOOD-MONGER.

THOSE of this trade are very few in number. They sell Faggots, Billets, &c. for firing; and some of them likewise deal in Coals. It is a trade that requires as little learning and abilities as any other that merely consists in buying and selling; but the masters do not usually take apprentices.

Of the WOOL-CARD-MAKER.

THIS tradesman makes Cards of wire, fixed on leather, and nailed on boards, which are used by the spinners of wool. It is but an indifferent business, though it is in few hands. The masters take from 5 to 10l. with an apprentice; who, when out of his time, will not be able to earn much more than the wages of a common labourer; however, if he has 50 or 100l. he may set up for himself.

Of the WOOL-COMBER.

THE Combing of Wool was discovered by bishop Wilkins, before whose time Wool was only carded, as is now practised by those who spin with the long wheel. The Wool-Combers require no great strength, nor any particular genius; but they ought to be able to bear heat. The wool is picked, oiled, and drawn upon the combs, which are fixed near a stove to keep them warm; thus it is cleared from all impurities, and prepared for spinning the finest sorts of Worsted, Jersey, &c. The masters take from 5 to 10l. with an apprentice; who, when out of his time, may earn from 12s. to a guinea a week; or, with between 50 and 100l. may set up for himself.

Of the WOOLLEN-DRAPER.

THE boy, designed for this business, ought to have the common qualifications necessary in every genteel trade. A stock of patience, great complaisance, and an engaging address, together with writing a good hand, and being well versed in accompts. The Woollen Draper buys his Cloths of a Blackwell-Hall Factor, or from the Clothiers in the Country. These Cloths they generally purchase white, and have them dyed and pressed near this metropolis; but mixed colours, or such blues as are dyed in the wool, they buy ready dressed. The Woollen-Drapers serve private gentlemen and the taylors retail, and the country shop-keepers wholesale. They take with an apprentice from 50 to 200l. give a journeyman about 20l. a year with his board and lodging; and require from 1000l. to 5000l. to set up as master.

Of the WOOL-STAPLER.

IT requires no great ingenuity to be master of this business, and no more learning than is necessary with respect to every other wholesale dealer. He buys the Wool from the farmer, and keeps large warehouses in town to receive it; where it is made up into several assortments fit for the manufacturers. It is a very profitable branch of business, in which from 50 to 200l. is given with an apprentice.

prentice. It requires 1000 l. to set up master; and some of them have above ten times that sum in trade.

Of the WORSTED-MAN.

THIS, like other businesses, that merely consist of keeping shop, buying, selling, and making up Parcels, requires very little genius, and no more learning than is necessary for every tradesman. These shop-keepers buy Worsted, or employ women to spin it; make it up into small skains and bottoms, and keep large quantities by them of all colours, and of different degrees of fineness. They likewise deal in crewels, which are the ends of the warps of Worsted or Yarn cut out of the loom; and some of them also deal in Bed-lace. They take 20 or 30 l. with an apprentice; and keep no other journeymen but as book-keepers, to whom they give 15 or 20 l. a year with their board. Few who have served an apprenticeship to this business, can therefore find employment; it is therefore worth no parent's while to bind his son apprentice to it, unless he is able to set him up when out of his time; to do which, in a handsome way, will require 3 or

C H A P. IV.

On the BEHAVIOUR of an APPRENTICE.

A BOY, on his being put apprentice, ought to consider that his parents, or his friends, have for his advantage devolved their authority on his master; whom he should regard as the deputy of those who gave him being, and to whom he is under the highest obligations. He should seriously reflect, that as he is now no longer to be under the eye of those who gave him his education, and have been solicitous for his welfare, honour and gratitude demand that their pious instructions and admonitions be not thrown away upon him. Let him consider, that his obligations and his duty to the common parent of mankind are the same, as if he was still under the care of an earthly parent; and that therefore he ought steadily to preserve a serious regard for religion, and conscientiously discharge his duty to his great Creator, who has a just claim to his reverence and love. Let him consider, that the laws of God are nothing less than the rules of happiness; that conscientiously attending divine worship every Sunday will be the only way of preserving a sense of religion upon his mind, and of securing him from the innumerable dangers to which youth are exposed; and that obedience to the laws of heaven

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is the only means of enjoying peace of conscience, the approbation of his own mind, health of body, safety from danger, the esteem of mankind, and that reputation which can alone insure his prosperity and success in business.

On the other hand let him seriously reflect, that, by being bound apprentice, he has made his first step into the world of business, and is fixed for life in one certain sphere of action; that his happiness here, and his felicity hereafter, depend upon the use he now makes of his time. And, if the hopes of being able to support himself, the prospect of a settlement for life, and of raising a fortune, can have any weight, they ought now to take place.

As it is supposed that he fixed upon his business from his own choice, and with his entire approbation, it may be reasonably believed, that he engages in it with delight; and this delight he should keep up by frequently reflecting what an advantage it will be to him to become master of it. The more he likes his employment, and the greater is the industry with which he applies to it, the sooner will the pains of learning be over; and the sooner will he do his business with ease and pleasure.

His interest and his happiness during so long a time as seven years depending on his master's esteem and affection, he should endeavour by every honest means

means to attain them. For this purpose he should be diligent in his business, and often reflect, that it would be criminal in him to trifle away the time that ought to be employed in his master's service. This should induce him to work closer in his absence than in his presence; by which means he will not only promote his master's interest, but sooner learn his trade. I do not doubt, but his father, his mother, or his guardian, have often told him that during his apprenticeship he must be faithful in every thing entrusted to his care and management. This he has promised in his indenture; this the laws of justice and his own happiness require. Now is the time for his acquiring a character for honesty and integrity, which will in every station of life contribute more to his success in business and his real peace of mind than every other qualification: For without honesty and integrity art and ingenuity are of no use. All mankind shun the villain, and rather chuse to deal with an ignorant or clumsy workman, than with an artful designing knave. Honesty will frequently set up a tradesman without money; it often procures him respect even in the midst of poverty, and friends in a country where he has no relations.

The apprentice is also indispensably bound to keep all his master's secrets both in relation to his trade, and the private affairs of his family. He
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should feel a tenderness for the character of him who is now his master, and constantly remember that it is equally base and disingenuous to carry tales out the family, or to entertain his friends at the expence of the reputation of his master and mistress. If he would live in peace in the family, he must carefully avoid interfering in the domestic concerns, and keeping close to his business, must never be guilty of tattling between the servants, or carrying tales between the husband and wife. He should behave in a respectful obliging manner to his master and mistress; interest himself in what concerns their happiness; and chearfully endeavour by every honest means to promote it.

If his master keeps many journeymen in the house, he will find it necessary to maintain a constant guard over himself to avoid being infected by their conversation; and frequently to recall to mind whatever he has heard or read, to strengthen his resolutions to adhere to the cause of virtue. His ears will be accustomed to profane oaths and obscenity; and if he shews any dislike to such discourse, they will endeavour to laugh and banter him out of his religion and his modesty: But let him consider the glory of maintaining his ground in spite of all temptations, and that he will be fully repaid for whatever trouble this may cost him, by the secret

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gratulations of his own mind, and the consciousness of obtaining the approbation of God himself.

Among the temptations a young man may meet with from journeymen, gaining a habit of drinking may be none of the least. He should therefore seldom drink in the workshop, and be very cautious of sitting down in a public house. The time spent there must be generally stolen from the master, or incroach upon the hours necessary for rest. The love of liquor and of company is the bane of a tradesman, and the certain road to ruin, and loss of health. The time, after business is over, a young man may employ in such a manner as will contribute to the happiness of his life, by his improving in such qualifications as may be of use to him when his time is expired ; as for instance in drawing, endeavouring to improve his style in writing, in arithmetic, in the study of mechanics, in reading history, voyages, travels, or in the rational conversation of a sober and virtuous friend.

Indeed every young man ought to be extremely careful of his company ; for as scarcely any thing can be of greater advantage than sometimes spending an hour with a sober sensible companion, so nothing can be more dangerous than the conversation of the rake and the profligate. What has been said of the abandoned fellows frequently to be found among the journeymen of London, may be applied to

to all companions of the same character: We easily assume the manners of those with whom we converse; we grow familiar with their vices by frequently being a witness to them; and we never lose our horror of vice, without being in some degree vicious; we then proceed step by step, till we commit the very actions which we before disapproved in our friends.

Now I am speaking of the dreadful effects of keeping bad company, it may not be improper to observe, that there are some accomplishments that are extremely dangerous: Among these a fine voice, and a good air in singing, have been often fatal to youth. The love of praise is a natural passion, and when a young man is sure of giving pleasure in a public house to his companions who meet there, he is under a strong temptation to resort thither; the clamour of applause makes him run to hear it; he soon neglects his master's business; becomes a sot; loses the powers of reason for a song; and from the fondness of praise is ruined and despised.

If the young man would preserve his integrity, he should be afraid of company addicted to the vice of gaming. I have already shewn how an apprentice may improve all his leisure time; but gaming is at best a dreadful waste of time; it excludes all improvement; and on being often practised for
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amusement, leads on to the dreadful depravity, that must be fatal wherever it takes place, of gaming for the sake of money. When this is the case, all sense of honesty is soon lost, the youth becomes uneasy when he is not engaged in play, suffers the keenest anguish when fortune proves unfavourable, and to repair the loss caused by his own folly, too often runs all the lengths that despair and villainy can suggest. The apprentice therefore who sets any value on his integrity and peace of mind, his reputation here and his happiness hereafter, must stifle his first inclinations to this vice, which he is justly forbidden to indulge by his indentures.

After what has been said, it may be thought needless to caution the sensible apprentice against ever going to those infamous assemblies called hops; in which a number of the meanest and most illiterate of both sexes meet in a public house to dance; for he who has a sense of honour, or any sentiments that can entitle him to the esteem of a worthy man, will shun these pernicious, illegal and dangerous assemblies, where youth are drawn into criminal engagements, and without seeing their danger, are soon involved in disgrace and ruin.

The strongest temptation apprentices can meet with is perhaps that which arises from women. They are in a dangerous season of life that calls for
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their utmost fortitude, and the united force of reason, interest, and religion, to break the snares that are laid for them by the abandoned and wanton prostitute: Snares that are rendered most formidable by what they frequently feel in themselves at this time, when the blood generally runs warm in their young veins, and they are prone to gratify the new-grown appetite. But let the young man consider, that all the arts and blandishments of these syrens are only to lure him into a state of misery; that he who embraces a common woman, embraces shame, disease, rottenness, and death.

As to what may be termed lawful love, the apprentice ought also to banish it entirely from his thoughts: For it will be time enough for him to think of marrying when he is able to provide for a family. He should consider marriage as an affair of the utmost consequence to his peace and happiness during the whole course of his life; and that therefore it is not to be undertaken without the greatest deliberation, and till he is able to enter into that state with credit. If he has nothing to depend upon when out of his time, let him consider, that he ought in prudence to live some time single, in order to save something to fit him for entering into so chargeable a state. These considerations should make him despise the allurements of his master's female servants. How many have been ruined during

during their apprenticeship by marrying their master's maid, and having a wife, and perhaps one or two helpless infants to provide for, before they are able to provide for themselves? Is this a desirable way of setting out in life, thus to bring on misfortunes as soon as they are able to feel them, and at once to destroy every hope of prosperity and solid happiness? I need not mention the assiduity with which these girls endeavour to please and gain the affections of their master's apprentices; I need not mention how ardently they pretend to be in love: But it may be proper to observe, that these very girls, by their conduct afterwards, generally shew, that they have been only acting a part, and had no other view, but to get rid of the dependence of servitude, and by their ungenerous behaviour these matches are usually rendered as unhappy as they are imprudent. Industry and assiduity in business will be the best means of avoiding these snares, and of preventing a young man's entertaining those chimerical and romantic notions of love that are the ruin of youth. And to avoid all temptation, he should be as seldom in the company of the servant maid as possible.

Let every apprentice consider, that this is the time not only of learning a trade, but of fixing his character for honesty, sobriety, and prudence; and on his behaviour at this time will in a great measure

sure depend the virtue and the vice, that will give a colour to his future life, and ever after denominate him a man of probity or a villain, the delight of his friends, or their shame and disgrace. As this is the time for fixing proper habits, let him take care that they are such as are manly and worthy of his nature as a reasonable being. We have already taken notice how he may improve his leisure hours : Let us now see how he may in this period encrease his knowledge of the world, and treasure up in his mind those maxims of prudence that will be of the greatest advantage to him as a tradesman.

Let the apprentice, when he begins to know his trade, resolve that no secrets in his art shall escape him, and endeavour by frequently searching his master's books, to be as well acquainted with the buying as the selling prices. Let him search into the different manners of working among the different journeymen, compare them with his master's performances, and see which is the neatest, and what method most easily and expeditiously accomplishes every different kind of work.

Let him examine the morals of all about him, and see if drunkenness and laziness are not always clothed with rags. Let him examine whether a slow and but indifferent workman, who is sober, careful, and in-

industrious, does not make a better appearance, and live in all respects more comfortably and more respected, than a man who has no regard to his actions. In the same manner let him examine every crime and every virtue he observes among men, and he will find that vice and misery are inseparable companions, and that virtue, prudence and happiness commonly go hand in hand together.

When he stretches his views forwards and observes the conduct of his neighbours, of those with whom his master is concerned in trade, and of all who fall within his notice, he will find reason to make the same observation. He will see that the young shop-keeper who launches out into expence, who keeps a horse, before he is well established in business; who has lodgings in the country, before he knows the expence of house-keeping in town, and who spends more time than is necessary in the alehouse or the tavern, is soon deficient in his payments, and in a little time, without any extraordinary losses in trade, becomes a bankrupt.

He will see that the tradesman who is fond of pleasure, and commits his business to the care of servants, is in the ready road to ruin; for, besides the expence in which he imprudently involves himself while he is abroad, business is almost constantly neglected at home; those on whom he confides

generally take advantage of his indolence to plunder him, or hurt his interest by their ill conduct.

He will perceive that even the sober young tradesman, who with sanguine hopes of success, begins the world by laying in a very great stock of goods, endangers his credit, and reduces himself to great difficulties. If most of his money is laid out in stocking his shop and furnishing a house, he will have great quantities of goods lie dead upon his hands till they grow old fashioned and become of little value; at the same time he will want cash when an advantageous bargain offers, and will have the mortification to find that a more cautious person, with a less fortune, will obtain the advantage he is obliged to reject. If great part of his stock was bought upon credit, he will find bills become due before he is able to honour them, and be reduced to great distress in order to make good his payments.

He will see some of his acquaintance ruined by keeping a great deal of company in order to get business, which involves them in expences they are unable to support. He will see others reduced to distress by being bound for a friend; and will have an opportunity of learning this maxim, that if a friend is in distress, and it is in his power to relieve him without any considerable inconvenience to him-

self, he ought to do it; but if he cannot advance money for him, he ought not to lay himself under an obligation of paying another's debt when it may be still more inconvenient: For though it is his duty to do humane actions, he is under no obligation to load himself with another's burden which he is unable to carry. But yet, if he cannot conveniently serve his friend by advancing the money, and is under no obligation to hazard his own liberty or credit, yet he may still be of service to him by his personal application and influence with the creditor.

Among the many secret artifices used to support a sinking credit, that of borrowing a friend's note is one of the most dangerous and fatal. The youth who is on the point of launching into trade, cannot be too strongly guarded against this snare, into which a good-natured young man is in great danger of being surprized: But the loss of credit, and sometimes the ruin with which it is attended, ought to make him steadily refuse to engage in such practices.

Among the many instructions and cautions usually given by parents that of being indefatigable in business is perhaps never neglected, as being dictated by wisdom and experience; but ought he not also to be told, that he should have a tender concern for the interests of others, and that he who
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grows wealthy by the low price he gives his labourers and journeymen, may properly be said to bottle up the tears of those who are ready to perish. Nay, in reality, I believe it will be found by experience to be the best and the most profitable method of proceeding; for he that pays good prices, and employs the best hands, will have the fairest means of raising a fortune with honour and reputation.

I shall conclude this article with observing, that every apprentice, in whatever circumstances he enters into the world, ought to build his hopes of success on his knowledge of the trade to which he is bred, the probity and integrity of his intentions, on his punctuality in dealing, his endeavouring if possible to improve the art he professes, and by acting in all respects as a fair dealer, a good man, and a christian.



Among the many inducements and cautions which are given by nature, that of being industrious in business is perhaps the most necessary, as being directed by wisdom and experience; but ought to be not less to be told, that he should have a tender concern for the interests of others, and that he who

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